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In Warsaw, Pope John Paul II kissing the gravestone of the Rev. Jerzy Popiełuszko, the slain pro-Solidarity priest.

Italians Begin Voting in Heated Election

By James M. Markham

ROME — Italians began voting Sunday for the 630-member Chamber of Deputies and the 315-seat Senate.

The polls also are open Monday, and the outcome of the election will not be known until Monday evening.

About 46 million Italians are eligible to vote for the Chamber of Deputies, and 38 million are eligible to vote for the Senate. The voting age is 18 for the lower house and 25 for the upper.

Many politicians and commentators have predicted that the balloting will open a period of uncertainty and political instability.

Italy's last general election took place June 25-27, 1983, and led to the formation of a five-party coalition led by Bettino Craxi, a Socialist. The coalition collapsed amid recriminations this spring, precipitating early elections.

about his intentions, turning away questions on whether he would accept a coalition with the Communists could, for the first time in Italy's postwar history, bring the Communist Party to power.

"The stakes are very high," said Mr. De Mita, fearing that large-scale abstentions could hurt his party. "Never has the alternative of the left been as near as it is in these elections."

The election has become a highly personalized contest between Mr. De Mita and Mr. Craxi.

To reach his goal, Mr. De Mita has at least equal the 32.9 percent share of the popular vote won by the Christian Democrats in 1983, according to politicians and commentators.

Mr. Craxi, who precipitated the elections by refusing to cede the office of prime minister to his Christian Democratic coalition partners, has replaced his spokesman

in a front-page column Saturday in *Le Repubblica*, Eugenio Scalfari, the newspaper's editor, said that the best recipe for post-election stability was a vote for either

the Socialists or the Christian Democrats. By contrast, he said, a draw will produce "a powerful and prolonged turbulence" in Italian politics.

The Communist Party, which won 29.9 percent of the vote in 1983, has demanded the formation of a leftist coalition in which it would be the largest component.

Alessandro Natta, the party's leader, made a final appeal for votes "to open a new phase in the history of our republic, to build a more just, free and advanced society."

But the Communists' principal goal is to avoid an erosion of their support, which in the last two national elections has fallen from a postwar high of 34.4 percent.

The Roman Catholic Church has several times weighed in on the side of the Christian Democrats. On the eve of the elections, the *Osservatore Romano*, the Vatican daily, praised the Christian Democrats' "clearness and political honesty."

Jaruzelski Upbraids John Paul

Refers to 'Alien Manipulations' As Pope Leaves

By Jackson Diehl
Washington Post Service

WARSAW — General Wojciech Jaruzelski angrily denounced "alien manipulations" of the truth about Poland here Sunday as Pope John Paul II concluded a seven-day visit in which he offered impassioned support for the banned Solidarity trade union.

The pope and General Jaruzelski, who talked for 70 minutes after John Paul's arrival on Monday, held a 55-minute second encounter late Sunday afternoon at Warsaw's Okęcie International Airport, shortly before the Polish-born pope left for Rome.

Then, as the pope stood alongside him at a ceremony on the airport tarmac, General Jaruzelski read a statement that bluntly expressed his bitterness over John Paul's emotional embrace of Solidarity and his repeated calls for reform of Poland's political system. "Your Holiness, who will soon bid farewell to your homeland, will take its picture with him in his heart but cannot take with him its problems," the general declared as John Paul closed his eyes and grimed.

"Poland needs truth," the general added. "But truth about Poland is necessary, too. How frequently in recent days has it been the victim of alien manipulations so offensive to the common sense of our nation?"

Sarcastically referring to the pope's repeated evocations of Solidarity as both an organization and a quality, the general added: "May the word 'solidarity' be heard from this land for all people who continue suffering from racism, neocolonialism, exploitation, unemployment, reprisals and intolerance."

The general's unusually harsh remarks came at the end of a day in which John Paul completed his show of support for the country's political opposition by kissing the gravestone of the Rev. Jerzy

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Students demonstrating in Seoul in support of those who have occupied the Myeongdong Cathedral since Wednesday.

Police Retreat In Seoul

Students Still In Cathedral After 5 Days

By John Burgess
Washington Post Service

SEOUL — Street violence here dropped sharply Sunday as worshippers flocked to a Roman Catholic cathedral that has been at the center of five days of dissident protests and riot police abruptly withdrew from the streets around the church.

The departure of the police late Sunday night, which ended a military-style siege, appeared to be aimed at getting radical students who have been taking refuge there since Wednesday to go home.

It was one of several conciliatory steps the government has taken in hopes of ending the confrontations.

Tension remained high, however, and few students seem inclined to leave the church, which had turned into a political rallying point for dissidents.

"We want to make these grounds a symbolic bastion of the fight for democratization in our country," a student was quoted as saying to Reuters on Sunday. "We will hold our here until our demands are met."

Government officials appeared relieved to see a marked reduction in the demonstrations, but they played down reports that the government was considering emergency measures to suppress the protests.

They also noted that leaders of the government party will meet Monday with the opposition to discuss opening a special session of the National Assembly to discuss solutions to the crisis.

Government officials and members of the governing Democratic Justice Party met Sunday for internal talks, and television reports indicated they would seek a voluntary end to the crisis.

The government is seen as eager to avoid using force. It did so in 1980 during demonstrations in the city of Kwangju, and more than 200 people were killed. That incident has hindered public acceptance of President Chun Doo Hwan.

With the 1988 Summer Olympic Games set to open in Seoul in 15 months, the government also is eager to avoid creating an image of repression and dictatorship.

The demonstrations began Wednesday, in protest against the death of a student during police torture as well as the nomination of Roh Tae Woo, the ruling party chairman and a former army general, to succeed Mr. Hwan.

Although the protesters appear to be only a tiny minority of South Korea's one million university students, the bold tactics they have used have kept their struggle in the public eye.

In taking their cause to Myeong-

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Kiosk

Ford Pulls Back In South Africa

JOHANNESBURG (UPI) — Ford Motor Co. is negotiating to sell its interest in a South African subsidiary, the chairman of the local branch said Sunday.

Ford will continue to supply its local affiliate, the South African Motor Corp., with vehicle components, management and technical assistance.

Lakers Win NBA Title

NEW YORK (UPI) — The Los Angeles Lakers captured the National Basketball Association championship Sunday, defeating the Boston Celtics, 106-93, in the sixth game of the best of seven series.

Mr. Reagan plans a nationally televised address from the Oval Office on Monday night in which White House officials say he intends to challenge Congress, which is controlled by the Democrats to overhaul the budget process.

The president may also suggest the adoption of economic principles that would lock in his priorities after he leaves office in 20 months.

An official called the address an attempt to "get the debate focused on our domestic economic policies and get Congress to face facts to put in place a budget process that is reliable and credible."

Mr. Reagan is also facing a series of potential veto confrontations with Congress over a money bill that includes arms-control restrictions he opposes, trade legislation that he has called protectionist and a housing bill that exceeds his budget request.

The official said there were "more, rather than less, potential conflicts" facing Mr. Reagan before the August congressional recess. The president is planning to visit Capitol Hill this week to lobby on the trade bill that is expected to reach the Senate floor shortly, and he used his weekly radio address Saturday to speak out against restrictive trade provisions.

Also this summer, Mr. Reagan is expected to devote his efforts to building support for a treaty to eliminate medium- and short-range missiles from Europe.

He said Friday in Bonn that he expected Mikhail S. Gorbachev, the Soviet leader, to come to the United States this year to sign such a treaty, which would require Senate ratification.

Mr. Reagan is expected to announce in the Monday address that he has ordered an affirmative response he sent to the Soviet Union on the "double-zero" plan for removing these missiles from Europe, with some conditions attached to satisfy U.S. allies.

White House officials also say they expect to spend part of the summer grappling with the Iran-contra hearings. Since the hearings began in May, Mr. Reagan has attempted to advance his policy agenda regardless of the controversy.

These are accompanied by a new campaign by revisionist historians who contend that the Holocaust is an invention, that the gas chambers at Auschwitz, Treblinka and other Nazi death camps never

Fights Ahead Singapore Plans to Ensure Multiracial Elections

By Michael Richardson

International Herald Tribune

SINGAPORE — Concerned by the rise of racial politics in parts of Asia and the Pacific, the government of Prime Minister Lee Kuan Yew is planning changes in Singapore's political system that it says will provide better protection for the rights of minorities.

Sources in the governing People's Action Party said the changes would probably occur before the next general elections, due in early 1990 at the latest.

They would likely coincide with

the retirement of Mr. Lee as prime minister and his accession to a new post of elected president.

The sources said the government was studying two important modifications to constitutional arrangements for parliamentary democracy inherited when British colonial rule ended in 1959 and the People's Action Party, led by Mr. Lee, came to power.

One is to combine more than a third of Singapore's single-member constituencies, or election districts, for elections to Parliament, making them three-member electorates.

The three successful candidates

would be from the party that won the most votes.

It would be mandatory for all parties campaigning in each of these enlarged electorates to include in their team a candidate from one of Singapore's racial minorities.

Of the population of 2.6 million, 76 percent are of Chinese descent, 15 percent Malay and 6 percent Indian. The rest are Eurasian and other ethnic groups.

A second proposal under study involves the position of president.

At present, the incumbent plays a largely ceremonial role as head of state.

In a recent interview, Sinnathambu Rajaratnam, senior minister attached to the prime minister's office, said the government was considering introducing an elected president with powers to protect Singapore's large foreign currency reserves from being squandered by any future administration.

He said an elected president would also have the authority to work closely with an existing president.

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Huge Satellites Are Key to Soviet Plan to Transform Sun's Energy Into Power on Earth

By William J. Broad

New York Times Service

NEW YORK — The Soviet Union is drawing up plans to build huge satellites in orbit that would convert sunlight into electricity for cities and industry on Earth. Soviet scientists and American experts say.

It would use the giant new rocket it has developed to put the satellite components into orbit.

The idea was developed in the United States in the 1960s and 1970s but was abandoned as too costly and environmentally controversial.

In recent weeks solar power satellites have been hailed by Guriii I. Marchuk, head of the Soviet Academy of Sciences, and by other Soviet officials discussing uses for the giant new rocket.

Western experts say the plan apparently consists of several stages:

The first is creating space-based solar reflectors, large mirrors that can bounce sunlight to Earth to provide lighting at night. The second is placing in orbit the huge satellites capable of transforming sunlight into energy. The third is constructing antennas on the ground that will receive energy from the satellites, and feed the electricity it generates to a power grid.

Soviet officials have provided few specific details of the plan. It is believed they will execute its first phases in the 1990s, with full development expected early in the next century.

"The ultimate goal is to beam energy back to Earth" for conversion into electricity, said Nicholas L. Johnson, an expert on Soviet space programs at Teledyne Brown Engineering in Colorado Springs, Colorado.

William R. Graham, a science adviser to President Ronald Reagan, said the solar initiative might not be entirely peaceful, however. "There's no strong division in their large projects between the civilians and the military," he said. "A substantial power capability in space is something they could put to many uses."

Some experts say solar-powered satellites could threaten the space-based arms and sensors proposed as part of Mr. Reagan's space-based missile defense program.

The solar satellites in development by the Soviet Union go far beyond the small arrays of solar cells used to help power spacecraft. The Russians plan huge floating platforms covered with solar cells, which convert sunlight into electricity.

Experts in the United States said it would take years to see how aggressively the Russians pursue their goal to deploy solar satellites. If pursued vigorously, the Soviet plan could become a prime justification for the giant new rocket, whose rationale has mystified some Western experts.

The new rocket, Energia — "energy" in Russian — was launched at the Baikonur Cosmodrome near Tyuratam in Kazakhstan on May 15. Western experts said it might be used to launch Soviet space shuttles, space stations or

planetary probes. Defense Department officials said it also could deploy space weapons.

The 220-foot (67-meter) rocket can lift payloads greater than 100 tons.

A few days after Energia's test flight, Mr. Marchuk told

'There's no strong division in their large projects between the civilians and the military. A substantial power capability in space is something they could put to many uses.'

— William R. Graham,
Science adviser to President Reagan

the official news agency Tass that the new rocket would permit "the placement of experimental solar power plants in orbit, paving the way for the 'industrialization' of space." Other officials echoed his comments.

Although the Russians have seized the initiative, the idea of solar-power satellites originated in the United States in the late 1960s.

By the mid-1970s, a U.S. system was envisioned as having 60 satellites, each one 55 square miles (142 square kilometers) in size — an area the size of Manhattan — in stationary orbits 22,300 miles above Earth.

Satellites covered with solar cells would beam energy to Earth in the form of microwaves that would be picked up by antennas, converted into electricity and fed into the electric power system. A single solar satellite, or "sunsat," was seen as capable of generating power equal to as much as could be produced by 10 nuclear power plants.

After the government spent \$20 million studying the notion, and environmentalists who feared damage to the Earth's atmosphere and wildlife criticized it, the proposal foundered in the early 1980s, part because of the projected cost of building it.

The National Aeronautics and Space Administration put the cost at \$300 billion to \$300 billion. The National Academy of Sciences in 1981 estimated it would take \$3 trillion over 50 years, calling it "by far the largest, most costly and most complex" project ever envisioned by man.

In 1984, Pravda, the official newspaper of the Communist Party, reported that research was under way to use huge orbiting reflectors to light Soviet cities at night and to fight crop-damaging frosts on farms.

A test project at the Moscow Institute of Avionics, it said, was creating a 440-pound test payload that would unfold in space to create a reflector with a working area of

about 1,200 square feet. It said full-scale reflectors could be in routine use by 1990s.

Early in 1985, the Soviets announced a project called "Star Electricity." It intended to build, by the end of the century, a "power plant in outer space working on solar energy."

In the February 1985 issue of Space Policy, a British publication, Leopold Leskov, a Soviet scientist, elaborated on the project's rationale: "The operation of these space giants does not require the consumption of natural power resources and will not affect the environment in any major way."

Mr. Leskov added that "the success and the scale of implementing this program will depend on the design of carrier rockets."

In interviews, Western experts said such a system might require several stages of development in space before microwave beams were directed through Earth's atmosphere toward antennas on the ground. Beams might first be used to power industrial processes aboard Soviet space stations, and then to fuel space tugs moving payloads between orbits.

The experts also said orbiting solar satellites and reflectors could be used in both peace and war. Mr. Johnson of Teledyne Brown noted that reflectors "could light up a battlefield at night." In the 1960s, space reflectors were considered by the U.S. military for use in the Vietnam War.

WORLD BRIEFS

Sikhs Kill 25 in New Delhi, Punjab

NEW DELHI (AP) — Sikhs militants killed 25 people in a massacre in New Delhi and in attacks in Punjab state over the weekend, police said Sunday.

Sikhs in New Delhi killed 12 and wounded 20 in a shooting spree Saturday. The incident was the deadliest caused by Sikhs radicals in the capital since a series of explosions killed 87 people in May 1985. Police said all the victims in the capital were Hindus.

Thirteen other people were shot and killed in attacks in northern Punjab state. Radicals waging a guerrilla campaign for a separate Sikh nation in Punjab have been blamed for more than 400 deaths there this year.

Pravda Mocks Reagan on Berlin Wall

MOSCOW (AP) — Pravda, the Communist Party daily newspaper, mocked President Ronald Reagan on Saturday, saying that he was crying "crocodile tears" in calling on the Soviet Union to tear down the Berlin Wall.

The newspaper said that the West had made building the wall necessary and that Mr. Reagan's speech, delivered Friday in West Berlin, was a threat to the sovereignty of East Germany. Mr. Reagan called on the "crocodile tears" in calling on the Soviet Union to tear down the Berlin Wall.

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Paris Air Show, June 11th-21st 1987.



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10

The time has come for the elite decision makers in the aircraft field to face the manufacturers, highlight the winners, and set the trends: the Paris Air Show is open now. If you believe that a plane has to be one of the most outstanding achievements of our time, a balance of technology, science and beauty, a harmony between high performance and extreme safety, no doubt we shall have the privilege of your visit at the Falcon display.

The widebody FALCON 900 is the most accomplished of large business jets. It's the only one built with the computer technology used for Mach 2 + fighter jets. The only

one that doesn't need artificial gimmicks like winglets, vortilons and stick-shakers. The only one to offer three-engine safety. The only one with no flight restrictions to cross oceans and deserts, under airline safety standards.

Today's large business jet operating community, major corporations and governments, know Dassault's name stands for. The worldwide reputation of the FALCONS 10/100, 20/200 and 50 is

already well established. And the new FALCON 900 has, again, redefined the limits of what a modern-day, large-cabin business jet should be.

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Dassault International



Business takes off with Falcon

late May. "We don't need to play a game of chicken. We need to run the system on cold instead of hot

ment this year.

"It's the experience level we're worried about," said Vic DePaula,

gerated — that airline travel is disintegrating into chaos, the proposal will figure as a major bar-

ries to make up for the lack of command-cooperative than us.

Congressional Panel Says Officers on Stark Failed to React in Gulf

By George C. Wilson
Washington Post Service

WASHINGTON — The House Armed Services Committee has said that the officers of the USS Stark failed to react soon enough to the threat of an approaching Iraqi aircraft in the Gulf on the night of May 17 when Exocet missiles slammed into the ship, killing 37 sailors.

"With 20-20 hindsight, the evidence shows the Stark should have radioed a warning to the Iraqi Mirage much sooner and should have turned broadside to unmask all its equipment, radar and weapons so they could have been brought into action," the committee chairman, Representative Les Aspin, Democrat of Wisconsin, said in releasing a preliminary report on the disaster.

The report was based on a field investigation by the committee staff.

Mr. Aspin said the investigation indicated that "a confluence of circumstances" by the ship's personnel and by the Iraqi pilot caused the tragedy, not faulty equipment or inadequate rules of engagement.

Among the findings in the report were the following:

• The ship's officers did not warn the Iraqi pilot in time or take proper precautions. When the Iraqi plane was 43 miles (70 kilometers) away, a petty officer asked if a warning should be issued but was told not to do so by the tactical action officer. Warnings were sent when the plane was 13 and 11 miles away, and "it is possible that both missiles were fired before we warned the plane," Mr. Aspin said.

• The Iraqi pilot failed to tune in to or heed the warnings and fired his missiles at a radar blip rather than looking to see what he was shooting at, as do Iranian and other pilots flying over a waterway crowded with ships of many nations.

• Captain Glenn R. Brindel was in his cabin, having just used the toilet, when the missile hit, and he said in a written statement that he was not informed that the plane was making a close approach.

• An audio alarm designed to alert the ship to incoming missiles was turned off because of too many false alarms. The report said it was probable that a crewman watching a radarscope "was distracted and missed the visual signal" that should have appeared on his screen.

• The lookout who first detected the missile was not told of the Iraqi plane and did not tell his superiors about his first sighting. "Only sec-

onds before impact, the lookout realized it was a missile, started screaming 'Inbound missile, inbound missile,' and hit the deck," the report said.

• Three days earlier, the destroyer USS Coontz had a similar experience with an approaching Iraqi Mirage. The plane turned out to have another target, a tanker, but the Coontz reacted properly, radiating its first warning 39 miles away. It turned to allow its weapons to be used against the plane, an antiaircraft missile was loaded into a launcher, and chalk, designed to divert an incoming missile, was prepared for firing.

The committee stressed that it did not have all the facts when it wrote its report, and it termed the successful efforts of the officers and crew in keeping the Stark from sinking after it was hit "nothing short of heroic."

The inquiry did not include interviews with the Stark's skipper or by the Iraqi pilot caused the tragedy, not faulty equipment or inadequate rules of engagement.

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Glenn R. Brindel

ons from China, including anti-ship missiles, and he warned the U.S. and the Soviet Union to stay out of the Gulf. The New York report from Beijing.

He added that if Iraq would stop attacking ships in the Gulf, Iran would do likewise.

He made his remarks in response to reports that China has sold Iran surface-to-surface missiles of the type known in the West as Silkworm.

China has denied making such a sale.

The captain also asked why the Stark's combat team "was unable to defend this attack" and "why no missile launch was detected on the air search, fire control radars" or the receiver that is supposed to identify the plane or missile that is emitting radar signals in the area.

Captain Brindel disclosed that while the Iraqi plane was still at a safe distance he had ordered the Stark to conduct a full-speed run, a test during which the ship is run at full power. Navy skippers say this is a demanding operation that is seldom conducted when a ship is on patrol at night in a dangerous and congested area like the Gulf.

Navy officials said it is likely that Captain Brindel and key officers and sailors were focused on the test rather than the approaching Iraqi plane.

The committee report said the Stark clearly was outside the zone where Iran had said it would operate its ships.

• China Arms Link Denied

Iran's foreign minister, Ali Akbar Velayati, denied Saturday that his country had received any weap-

Geraldine Page Dies; Actress Was 62

The Associated Press

NEW YORK — Geraldine Page, 62, a Broadway actress for more than 40 years and the winner of an Academy Award for best actress last year for "Summer in the Smoke."

Miss Page had been nominated for a Tony award for "Blithe Spirit," a Noel Coward comedy on Broadway in which she portrayed an eccentric medium who contacts the dead.

She had missed a Saturday matinee performance, and police said she was later found dead.

Miss Page won an Academy Award for best actress last year for her role in the film "A Trip to Bountiful," in which she played an aging woman who returns to her home town.

Other of her recent films were "I'm Dancing As Fast As I Can" in 1982 and "The Pope of Greenwich Village" in 1984.

Miss Page also won Emmys in 1966 and 1967 for the outstanding single performance by an actress in a television drama.

She was born in Kirksville, Missouri.

Miss Page was married twice, first to Alexander Schneider and then to Rip Torn, an actor; both marriages ended in divorce. She had two sons and one daughter.

Miss Page was a fluttery-voiced, girlish actress who specialized in playing neurotic, lost women, especially the heroines of Tennessee Williams. She first gained notice on stage in 1952 while playing Alma Winemiller, the repressed spinster in a revival of Williams' "Summer in the Smoke."

The play failed on Broadway four years earlier, but Miss Page's performance impressed critics and audiences. It was one of the earliest successes of this fledgling off-Broadway movement.

The last major exhibit organized by Mr. Iolas was "Andy Warhol's Cenacolo," unveiled in a Milan pavilion.

Mr. Iolas, who was born in Alexandria, Egypt, first won fame as a young dancer in the neo-classic Greek school of Isadora Duncan. He danced in salons in Rome, Berlin and Paris before moving to New York, where he opened an art gallery in Manhattan that he later said "introduced Americans to Cubism."

Brooks Atkinson, a theater critic of The New York Times, once wrote of her: "Miss Page is not a forceful woman; she does not impose herself on the parts she plays. But somewhere behind and beneath the modesty and poignancy of her personality lies an extraordinary perception, which illuminates the characters she plays."

Before she won her Academy Award, Miss Page had been nominated seven times; she lost more Oscars than any other actress in the motion picture academy's history.

She told the Los Angeles Times in 1970: "One of the things that intrigued me about acting from the start was that you could be burned at the stake as St. Joan six times a week and not have to molder in the grave."

Alexander Iolas, 78, Greek Dealer in Pop Art

ATHENS (AP) — Alexander Iolas, 78, a leading Greek art dealer and patron of pop art, died Monday in a New York hospital, friends said Wednesday. The cause of death was not given.

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Ralph Guildahl, 75, A Leading Golfer in '30s

NEW YORK (NYT) — Ralph Guildahl, 75, a tall Texan who dominated professional golf in the late 1930s only to give up the tour for lack of interest, died in his sleep Thursday at his home in the Los Angeles suburb of Sherman Oaks.

He was the golf professional at the Braemar Country Club in Tarzana, California.

In a span of four years he won the Western Open in 1936, 1937 and 1938; the United States Open in 1936 and 1937; and, after two straight second-place finishes, the Masters in 1939. He also played on

three consecutive Ryder Cup teams, in 1937, 1939 and 1941.

Tuvia Bielsky, 81, Led Jewish Anti-Nazi Troop

NEW YORK (NYT) — Tuvia Bielsky, 81, the leader of an armed band of Jewish partisans in Nazi-occupied Belarusia that was known as Bielsky's Brigade, died Friday in Brookdale Hospital in Brooklyn. A resident of Brooklyn, he used the surname Bell.

Beginning in 1941, Mr. Bielsky's group operated against the Nazis from the forests of the Novogrudok region of Belarusia, the Soviet Union, harboring Jewish families and conducting raids against the German occupiers.

■ Other deaths:

Elizabeth Hartman, 43, an actress nominated for an Oscar for her first film role in the 1966 movie "A Patch of Blue," Wednesday after she jumped from a building in Pittsburgh.

Leo Sullivan, 66, a former editor at The Washington Post and public relations director of the Kennedy Center, Wednesday of cancer in Washington.

Raya Dunayevskaya, 77, an author, lecturer and former secretary to Leon Trotsky, Tuesday in Chicago.

Daniel Mandell, 92, a film editor who won Oscars for "Pride of the Yankee" in 1942, "Best Years of Our Lives" in 1946 and "The Apartment" in 1960, in Newport Beach, California.



Geraldine Page, with the Oscar she received last year for best actress.

John Davenport, 82, an author and free-lance writer who was a former assistant managing editor of Fortune magazine, Monday in Red Bank, New Jersey.

Jack Dunn, 34, 65, a longtime Baltimore Oriole executive, Thursday in Baltimore after heart bypass and colon surgery.

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Uncertainty Shadows Conciliatory Moves by Chun's Likely Successor

By Clyde Haberman
New York Times Service

SEOUL — As Roh Tae Woo, the man almost certain to be South Korea's next president, was talking about his desire for political reconciliation at a news conference last week, members of his party sat behind him, coughing and dabbing their eyes with handkerchiefs.

Unexpectedly, they had taken in nasty gulps of tear-gas fumes that clung to the clothing of reporters and photographers.

There was mild irony in the discomfort of the ruling group, which was suffering what many of its fellow citizens have endured in tur-

NEWS ANALYSIS

moil in Seoul's streets. For days, riot policemen had saturated the center of the city with tear gas to end demonstrations by student radicals committed to toppling the authoritarian government.

Skirmishes between dissidents and the police were the most violent and prolonged street actions that the capital had seen in several years.

As the protests continued into the weekend, they cast a menacing shadow over what was to have been Mr. Roh's week of triumph.

On Wednesday, 7,300 delegates at a convention of his Democratic Justice Party acclaimed him as their presidential nominee.

The convention was window dressing. The only note that really counted had been cast a week earlier when President Chun Doo Hwan named Mr. Roh, his old friend and fellow former general, to succeed him next February.

The street clashes that followed Mr. Roh's nomination indicated the delicacy of his political situation, as he prepares to become president.

Not that the band of militant students seems capable of attracting the broad popular support needed to upset the transition. But, as one foreign diplomat put it, "They can make it messy."

It was already messy enough for Mr. Roh. As a key player in Mr. Chun's bloody consolidation of power seven years ago, Mr. Roh faces the same challenges to his legitimacy that have dogged the incumbent president.

One difficult task he faces is to carve a distinct political identity for himself quickly. There are signs he is trying.

Last week he called on the main anti-government party to join in a political dialogue. He proposed — without offering specifics — fewer constraints on the press and on

provincial governments. And he said he was willing to discuss the length of his term in office with opposition leaders.

That last effort was seen as a gesture of willingness to eventually resume an essential debate ended abruptly by Mr. Chun: how to change the constitutional process for selecting the national leader.

Pressure may mount for Mr. Roh to convince Koreans he is serious about a dialogue. A likely move would be for his party to advocate changing the electoral college rules to make them fairer; this could lure the opposition to participate in the process and make it seem more legitimate.

But the opposition will probably stick to its boycott plans. Moreover, it is hard to imagine that any of Mr. Roh's pledges might change general attitudes about a government widely seen as unpopular.

Mr. Roh cannot guarantee quick delivery on anything he proposes, for Mr. Chun says he intends to wield power up to Feb. 25, 1988.

While his heir apparent talked about democracy to party delegates last week, Mr. Chun barely mentioned the word in his own speech.

It has long been plain that Mr. Chun considers his intention to leave office — the first South Korean leader prepared to do so voluntarily — as being of itself the most important step toward democracy that the country has taken.

Unlike Mr. Roh's remarks, the president's comments emphasized dealing sternly with radicals. "no matter what sacrifice may be necessary."

A question is whether Mr. Roh will indeed be a substantive change from Mr. Chun. Mr. Roh himself agrees he will pursue his predecessor's basic policies, with their overriding concern for national security, economic progress and limited political dissent.

The major difference, experts say, may involve personal style. Mr. Chun talks incessantly and does not listen, people who have spent time with him say. In contrast, Mr. Roh is said to have accepted the rough-and-tumble of party politics and is more willing to listen.

The Western democratic process, Mr. Rajaratnam assured, was "breaking up in parts of Asia. The South Pacific and Africa because of racial and religious intolerance and rampant corruption."

He mentioned Sri Lanka and Fiji as recent examples where ethnic suspicions and rivalries had caused political turmoil.

There was no imminent danger of this happening in Singapore, he said, adding: "But we are not nec-



UN Troops, Protesters Scuffle on Cyprus

United Nations peacekeepers trying to keep Greek-Cypriot demonstrators from passing through a cease-fire line near Nicosia on Sunday. The women wanted to cross to the Turkish occupied north and go to the Turkish Embassy to protest the division of the island. Many of the demonstrators were refugees who fled from the northern part of the island during the 1974 invasion by Turkish forces.

SEOUL: Students Occupy Cathedral but Violence Ebbs

(Continued from Page 1)

human barriers to defend the students in the event of a police raid. "We support their spirit of protest of democracy," said Augustine Ko, secretary to the leader of the country's Catholics, Cardinal Stephen Kim. The church is urging the students to forsake violence, he said, and has confiscated gasoline bombs from them.

Thousands of people strengthened into the brick cathedral on Sunday. Some came for scheduled Masses;

essarily immune. We need to construct protective walls."

Singapore emerged from a period of racial tension, high unemployment and Communist agitation in the 1960s to become a stable, multi-racial country with one of the highest living standards in Asia.

The People's Action Party won 77 of 79 seats in Parliament at the last elections in December 1984 and has the necessary votes to make the required constitutional changes for electoral reform. The party has always run a multi-racial slate of candidates.

However, Mr. Rajaratnam said, there was currently no requirement for opposition parties to do so.

He said the government had proposed the proposal to introduce three-member constituencies as a means of discouraging any party from trying to win office by appealing to particular racial, religious or linguistic communities.

Other People's Action Party sources said legislation to combine 30 to 33 single-member constituencies into larger voting units, each with candidates standing under one party banner, might be put to Parliament for approval in the last quarter of 1987.

Chiam See Tong, an opposition member of Parliament, said the People's Action Party's superior organization and resources would give it an unfair advantage in campaigning for three-member electorates.

"The end result, as I see it, could be perpetual and absolute control by the PAP," he added. Government sources denied this, saying that if anti-government feeling was strong, the party risked losing seats in multiples of three.

They said that the establishment of an elected presidency was dependent on the timing of Mr. Lee's retirement as prime minister.

Mr. Lee foreshadowed his intention to step down when he referred at a National Day rally in 1984 to the practice of chief executive officers in U.S. corporations returning at 65 after ensuring a smooth succession.

In an American television interview, a summary of which was published in Singapore on Sunday, Mr. Lee said he had not made up his mind when to retire but would probably make the decision next year. He will be 65 in September 1988.

Mr. Lee is the logical candidate to become Singapore's first elected president, and his occupancy of that post will help sustain confidence in the future of the country, Mr. Rajaratnam added.

Mr. Geh, the first deputy prime minister, is considered by most political analysts to be the most likely candidate to succeed Mr. Lee.

French Minister Rejects AIDS List

PARIS — The French health minister, Michel Barzach, rejected on Sunday a plan by the Alps-Maritime department to keep an anonymous record of people infected with the AIDS virus.

The minister issued a statement saying the plan, which the Alps-Maritime authorities maintain will make it possible to follow the progress of the disease more closely, overstepped the department's powers, which cover only measures to combat venereal disease. "AIDS is not a venereal disease," her statement said.

The Alps-Maritime department, which borders Italy, is one of France's most politically conservative regions. The departmental council approved the plan for a computer register of AIDS carriers on Friday.

This week, business, government and military leaders in Asia, Africa, Europe and the Middle East will turn their attention to the Paris Air Show. But first, they'll turn to The International Herald Tribune.

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SINGAPORE: Electoral Shifts

(Continued from Page 1)

dential advisory council to safe-guard minority rights.

Mr. Rajaratnam, a close associate of Mr. Lee, said a group of younger ministers headed by Goh Chok Tong, first deputy prime minister, was playing a leading role in working out these proposals.

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REAGAN: Fights Ahead

(Continued from Page 1)

sy, but the televised proceedings remain a source of attention and concern to his advisers.

Last week, at his news conference in Venice, Mr. Reagan devoted about as much time to answering questions about the Iran-contra affair as he did about the summit meeting and the Gulf.

On budget priorities, Mr. Reagan and the congressional Democrats have been at odds since the beginning of the year, with the president continuing to oppose tax increases or defense cuts.

White House strategists have watched with some satisfaction as the Democrats have been unable to agree among themselves on an alternative to the president's priorities. During this period, Mr. Reagan spurned Democratic appeals for negotiations on the budget.

As White House officials view it, the next phase calls for a public campaign by Mr. Reagan for his budget priorities and for some kind of overhaul of the budget process.

Mr. Reagan intends to make a series of appearances around the country in the next few weeks to underline this theme.

The White House has yet to embrace a plan for overhauling the budget process, but Mr. Reagan's chief of staff, Howard H. Baker Jr., has had extensive talks with congressional leaders. White House officials say an agreement on changes in the budget process could be a compromise on the budget itself.

However, there are few signs that Mr. Reagan is willing to offer any concessions, such as increased taxes or cuts in defense spending. Some White House officials said he was so intransigent on this that he would prefer to leave office next year defending his priorities rather than make progress in reducing the deficit by compromising on these points.

Despite his assertion that the U.S. deficit was reduced by \$40 billion last year, allied leaders in Venice complained to Mr. Reagan that if the U.S. fiscal imbalance was hindering their economies.

He was shot on Feb. 6, 1945, at age 36, after the rejection of a plea for mercy signed by several officers.

"Why are we waiting to strike them?" he wrote. "What are we waiting for to shoot the Communists who are already imprisoned?"

He was shot on Feb. 6, 1945, at age 36, after the rejection of a plea for mercy signed by several officers.

During his week in Poland, the church he added, should seek "collective cooperation" but

relationship with the Communist government.

Sounding a note of conciliation with the government, John Paul indicated that the establishment of formal ties between the Vatican and Poland, long sought by General Jaruzelski, was a real and in many ways desirable prospect. However, the pope cautioned, "We are facing a serious work," which he said was aimed not only at the realization of formal ties but also at "making it credible for the nation and the church."

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For Aquino, Shultz Has Praise, but No More Aid

By Neil A. Lewis
New York Times Service

MANILA — Secretary of State George P. Shultz arrived here over the weekend bearing expressions of good will but no financial aid bonuses for the government of President Corazon C. Aquino.

"When you think of what they have accomplished in the Philippines in what, a year and a half or something like that," Mr. Shultz said aboard his plane, "it's quite a success story."

He said economic initiatives had resulted in a real growth rate of more than 5 percent for the last quarter. "Their foreign exchange position is pretty good, and they have rescheduled their debt," he said. "They really have done quite a job."

He also praised Mrs. Aquino for taking a harder military line against the Communist insurgency after having first tried an offer of amnesty to induce the rebels to lay down their arms.

But Mr. Shultz said he regretted that overall budget cuts this year had resulted in a \$50 million reduction in what Washington had hoped to provide in military aid to Manila.

The United States is giving the Philippines \$413 million in overall aid this year, including \$50 million for the military. The administration originally had sought about \$100 million in military aid.

"I think the United States can say we've done well," Mr. Shultz said, "except I wish we had not had to reduce the military assistance program in the way we did."

When he meets with Mrs. Aquino on Monday, he is to sign an



Some of about 2,000 backers of Former President Ferdinand E. Marcos, picketing George P. Shultz's Manila hotel Sunday.

agreement to deliver \$163 million of this year's aid, but this is money that has already been allocated.

"We don't have any extra money for this year," a U.S. official said.

"The main purpose of the visit is to show the flag, to reassure Cory we haven't forgotten her."

Philippine officials have been expressing irritation and disappointment that U.S. aid has been slow in coming and have said that this has hampered their efforts to battle the rebels. One U.S. official said that the complaint was unfounded but that the Manila government was edgy because of the recent election and the continuing fighting.

Nonetheless, the United States delivered 10 helicopters to the military early in June.

"The basic judgment of the intelligence community is that the insurgency has continued to grow," the U.S. official said. "but at a much slower rate."

One issue that is in the background of the Shultz-Aquino talks but is not likely to be discussed in the future of the U.S. bases in the Philippines.

The agreement on the bases expires in 1991, but U.S. officials said they were not pressing Mrs. Aquino to settle the issue. "We want to cool it on this," said one, adding that with local elections coming later this year, "we want to keep contentious issues like the U.S. bases out of them."

Mr. Shultz said that the issue of the base agreement would probably bring up "in due time." However, he said that it would not be raised during this visit, his third since Mrs. Aquino assumed office.

"She's been concentrating on

other things," he said of Mrs. Aquino.

A-Ban Facing Test at the Polls

New Zealand Law Is Big Issue in Election Expected Soon

By Charlotte Evans
New York Times Service

WELLINGTON, New Zealand — New Zealand's ban on nuclear arms and nuclear-powered ships is now a matter of law, not just government policy, and the issue is certain to be a major one in national elections expected in the next few months.

The ban, which has strained relations between Wellington and Washington, became law by a 39-29 vote of Parliament on June 4, codifying the policy that has been in effect since Prime Minister David Lange's Labor government was elected three years ago on a pledge to make New Zealand nuclear-free.

The legal ban is an important symbol for anti-nuclear militants in New Zealand, who regard it as an example for the world.

But the jubilation of activists was tempered by the knowledge that an election victory by the opposition National Party over Labor will almost certainly mean repeal of the new law.

Jim Boiger, the leader of the National Party, called passage of the law "an exercise in futility" and said it did not make any contribution to arms control and did not guarantee that New Zealand would be immune from nuclear weapons.

Further, he said, it pushed aside the views of the many New Zealanders who are disturbed by the country's status in ANZUS, the mutual defense alliance with Australia and the United States. Because of the nuclear-weapons dispute, the United States has said it no longer feels obliged to come to New Zealand's aid.

While the ban has provoked trouble at an official level between the United States and New Zealand, it has not resulted in anti-Americanism. Indeed, an American living outside the diplomatic community might never hear of the nuclear issue at all, in contrast to the daily ribbing Americans took from New Zealanders when local boats were doing well early in the America's Cup races this spring.

Although the Labor government is adhering to its no-nuclear weapons policy, it does not check what kind of weapons may be allowed on U.S. planes that are allowed to use a base at Christchurch that is involved in an Antarctic research program called "Operation Deep Freeze." That U.S. program is worth about \$10 million a year to New Zealand.

Whatever their view of U.S. nuclear power and ships, New Zealanders acknowledge that the United States has immense influence on their daily lives, and talk about the United States is more likely to be about its television programs, movies and books than about the atomic issue.

"American values are now an integral part of our culture," said Mattie Wall, a public-relations consultant in Wellington, who returned to New Zealand last year after two years as vice consul in New York.

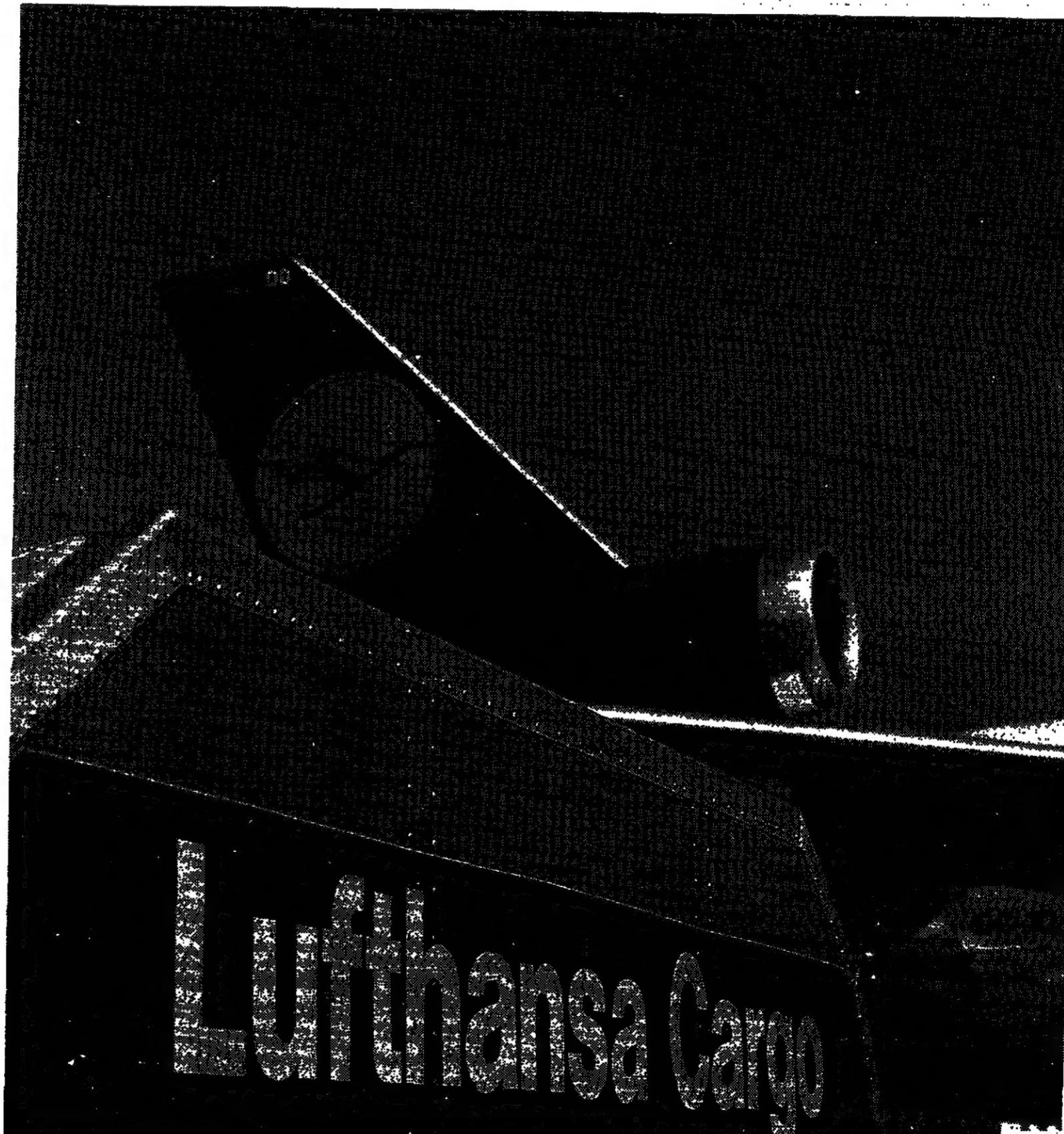
"All the changes in New Zealand in the last three years have moved us toward a greater Americanization in a loose sort of way," she said. "There's an increase in competition, an increase in recognizing ambitions, impatience, speed, material wealth."

At the same, she said, her generation had inherited, as a result of American participation in the Vietnam War, "an innate skepticism and cynicism about America's foreign policy motives and its capacity for being sensitive."

Others disagree with her view of Americans.

"I think they're a bloody marvelous people," said Bill Godfrey, president of the Ex-Vietnam Services Association, comprising veterans who fought in Vietnam. "One thing that's overlooked is that you can look anywhere in the world today and there are two big brothers. One is flying the hammer and sickle and the other is flying Old Glory. You takes your choice."

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MCCANN ERICKSON

Angola Leader Rules Out Talks With Rebel Group

By David B. Ottaway
Washington Post Service

WASHINGTON — An Angolan leader has ruled out talks with U.S.-backed anti-Communist rebels and has warned that the worsening conflict between South Africa and neighboring black African nations makes the withdrawal of Cuban troops more difficult.

Pedro Van Dunem, second-ranking member of the Politburo of Angola's ruling party, met Thursday with Chester A. Crocker, an assistant secretary of state.

In an interview Friday, Mr. Van Dunem gave no indication that he had made much progress toward persuading Washington to establish diplomatic relations with his government.

He seemed to suggest a widening divergency of interests between his government and the United States, and little hope for improved relations.

The basic interest in the United States, he said, "is withdrawal of Cuban troops, and everything is conditioned on this." The United States estimates there are 37,000 Cubans in Angola.

Mr. Van Dunem, on his first trip

to the United States, said Angola was interested for economic as well as political reasons in seeing the Cubans leave his country and would order them to go "as soon as conditions permit this."

But he said South Africa's strikes into neighboring countries made the prospects for a Cuban withdrawal more difficult.

Mr. Van Dunem also said his government continues to reject direct talks with Jonas Savimbi's National Union for the Total Independence of Angola, or UNITA. The insurgency is backed by South Africa and also receives \$15 million in covert military aid from the United States.

The Reagan administration has been pressing Angola to open talks with UNITA.

"If we have to negotiate, it's with South Africa we will negotiate," Mr. Van Dunem said.

He denied that his government was preparing a big offensive against UNITA forces this summer, but he indicated that Angola would launch its usual dry-season attacks. Mr. Savimbi has said he expects a major government offensive.

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Aviation: Changing the Rules

Second Thoughts in U.S.

Calls Grow For a Return To Regulation

By Martha M. Hamilton

WASHINGTON — Airline industry officials have an incantation that they use to ward off attempts to re regulate the industry:

Airline passengers have saved \$6 billion annually as a result of deregulation in 1978, according to a 1986 Brookings Institution study, and no congressional hearing, no speech goes by without reference to that report.

But increasingly, those same industry executives are confronting angry consumers and politicians who are asking whether consumers have not paid in other ways.

A rising number of complaints to the Department of Transportation about delayed flights, lost luggage, overbooking and other consumer troubles has prompted proposals to keep a tighter rein on the industry. In May, Transportation Secretary Elizabeth Hanford Dole wrote to the major passenger airlines warning of possible federal action unless the situation improved.

The department's response appeared to be, at least in part, its own attempt to head off efforts to increase airline regulation by members of Congress — who are frequent flyers themselves and no more tolerant of a lost bag than anyone else.

Although passenger complaints about service appear to be pushing U.S. policy makers to reconsider deregulation, it is not the only force at work. The wave of mergers and bankruptcies in the industry over the past several years has recreated an industry that looks quite similar in some respects to the industry that was deregulated in 1978.

That worries some lawmakers.

The airline deregulation act was expected to facilitate new entries and vigorous price competition in the industry.

"For a while it worked. Several dozen new airlines entered the market from 1978 to 1985," said Senator Howard M. Metzenbaum, an Ohio Democrat.

But he added that many of those same carriers have disappeared, and the industry has become more concentrated. In the short term, there is still price competition; in the long run, he predicted, prices will rise.

A study by the Transportation Center at Northwestern University in Chicago found that, during the first nine months of 1986, the top 10 air carriers controlled 94 percent of the market, compared with 90 percent controlled by the top 10 carriers in 1970.

"Of the 34 instant airlines [carriers that entered the market after deregulation] 23 have failed, and all six supplemental charter services have disappeared," wrote Frank A. Spencer and Frank H. Cassell in the study. "Of 541 nonhub airports, 150 have lost all service. More than half of the airlines in business in 1978 and two-thirds of the new carriers have failed."

In 1986 and 1987, several larger airlines acquired regional carriers, expanding their reach to allow them to compete in the new land of mega-carriers. American Airlines acquired Air Cal; Delta acquired Western, and USAir Group Inc. acquired Pacific Southwest Airlines. But the wave of mergers has begun to slow because most of the logical acquisition targets have been snapped up.

The largest airline company, after the wave of consolidation, is Texas Air with its fleet of 620 airplanes, about 200 more than the next largest competitor. The low-cost airline empire built by Frank A. Lorenzo is actually two airlines — Eastern Airlines and Continental, which absorbed New York

Continued on page 12



JEAN-PIERRE GOUAUX

Many 'flag-carrier' airlines may be forced into new alliances and, as often as not, forced to submerge their national identities.

For EC 'Flag Carriers,' Partnerships May Be a Necessity

By Giles Merritt

BRUSSELS — A few years from now, the landscape of the European airline industry may look so different as to be barely recognizable. Unless they adapt to it, today's "flag carrier" national airlines could well become the dinosaurs of civil aviation.

To avoid extinction, many of the national airlines will probably have had to group together into giant transnational combines. At the other end of the scale, tiny independent "feeder" airlines and specialist charter services will have seized a substantial part of the business that flag carriers today consider their natural market.

The process of concentration is already well under way in Europe. Although the sort of deregulation and air fare liberalization that will really put the pressure on national airlines to forge cross-border alliances is still to come, the writing is on the wall.

Sabena, the Belgian national airline, has just confirmed that its discussions about joining the Scandinavian Airlines System

(SAS) consortium have entered a more intense phase. In other words, it is likely that Belgium will soon join Denmark and the other Scandinavian countries in SAS.

The Belgian airline is at present looking for a formula that would enable it to share its heavy overhead and operating costs with the SAS partners while safeguarding Sabena's name and national identity. It is hard, however, to see how the two can be reconciled. But in any case the more significant thing about the talks seems to be the way that Belgium's political leaders have all grasped the point that running a major flag-carrying international airline is beyond their means.

Sabena's move toward new partnerships was signaled by its recent route-sharing pact with British Caledonian, in which the two airlines now operate a joint daily trans-Atlantic service to Atlanta. One of the major attractions of an SAS deal would be the complementary nature of Sabena's network of long-haul African routes and SAS's strength on routes to the Far East.

Civil aviation experts at the European Commission in Brussels suggest that the like-

ly Sabena-SAS tie-up will be the forerunner of more mergers between national airlines. They forecast that Europe's big three — British Airways, Air France and Lufthansa — will be able to compete internationally without encountering serious difficulties, but that most of the remaining flag-carrier airlines will be forced into new alliances and, as often as not, forced to submerge their national identities.

THE EC experts see the Sabena-SAS grouping being further swelled by the arrival of comparative small fry, such as Austrian Airlines and Portugal's TAP. That would create a new airline covering Europe from north to south and east to west and would also greatly strengthen its intercontinental routes with TAP's Latin American services and Austrian's routes to the Middle East.

Where middle-ranking European airlines would fit into the new pattern is unclear, but even major airlines, such as KLM of the Netherlands, Iberia of Spain and Alitalia of Italy are going to find it hard to compete in the 1990s, while heavy loss-makers, such as

Greece's Olympic Airways, face a very grim future.

The tougher operating conditions will stem in large part, of course, from European deregulation and the cutthroat competition that smaller carriers and newcomers will offer. But equally important will be the competitive pressure of the new breed of American "mega-carriers" which, in a number of cases, were created in the space of mergers and takeovers that occurred in the U.S.

The "big seven" U.S. airlines — American, Delta, Northwest, Orient, Pan Am, Texas, TWA and United — now represent formidable competition on intercontinental routes. Only 25 percent at most of the European airlines, business is in fact in Europe, so the need to defend that non-European revenue now represents the most compelling argument for deregulation — that it will streamline Europe's flag carriers into competitive shape.

The picture should not, however, be painted too bleakly. The signs are that Europe and much of the rest of the world are on the brink of a revolution in air transportation. The EC Commission's experts suggest that within 10

years, and perhaps as little as seven, the number of passenger-miles being flown will have doubled.

The implications of a doubling of the size of the civil aviation market are exciting. Even during the first half of the 1980s, while Europe's national airlines and their governments have been fighting a successful rear-guard action against deregulation, there has been explosive growth in the small airline sector. More than 50 newcomers, ranging from major airlines' new feeder subsidiaries to tiny owner-operator ventures, have started up in Europe.

There have also been many failures among these new airlines. More than 30 carriers have failed, leaving the total number of small independent airlines at around 90. But with the EC authorities making greater efforts to encourage regional air services between major towns and cities across Europe, the likelihood is that the small carrier sector will by the early 1990s have expanded dramatically.

GILES MERRITT is a journalist based in Brussels.



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on runways. Mr. Burnett said that controllers, in some cases, are being asked to direct more airplanes than they can handle.

"The FAA is trying to run the system up to the red line," Mr. Burnett told a Senate hearing in late May. "We don't need to play a game of chicken. We need to run the system on cold instead of hot."

"To add to the dilemma, senior controllers are retiring at a rate of about 500 a year, and at the air control facilities near Washington, Boston, New York, Chicago and Los Angeles, a third to half of the senior staff is eligible for retirement this year."

"It's the experience level we're worried about," said Vic DePaula, the propos

al controller who says

FAA may be tempted to cut short the restraining.

The drive has begun again this year, and this time, with a Democratic-controlled Congress and a perception — no matter how exaggerated — that airline travel is disintegrating into chaos, the proposal will figure as a major bar-

rier to the reauthorization of the retraining.

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New Gateway Hubs in U.S. Interior Are 'Shrinking the World'

We have made it possible for many more people to travel.

By Maria Saporta

ATLANTA — The recent emergence of new international gateways in the United States has opened up new cities and surrounding regions to people seeking business and tourism opportunities.

"We are shrinking the world," said Whit Hawkins, senior vice president of marketing for the Atlanta-based Delta Air Lines. "We have made it possible for so many more people to travel because of the opportunity to go to different destinations."

Mr. Hawkins compared the growth of international gateways to that of having a gas station on every corner. While the new airport hubs in the United States are not quite so numerous as gas stations, travel patterns have changed dramatically in the last 10 years.

It used to be that if travelers wanted to fly to the United States from abroad, they probably had to fly into the New York City or Los Angeles or San Francisco airports. Few other American cities were open to the rest of the world.

The traditional gateways were the existing coastal seaports, and the points that were closest to the international gateways," said Richard Murphy, an aviation consultant with the firm of Simat, Helliesen & Eichner Inc. in Waltham, Massachusetts. "The West Coast served the Pacific, the East Coast served Europe and Houston and New Orleans served Central and South America."

However, in the late 1960s, several interior cities and airports joined together to petition the federal government for permission to begin international service to Europe.

These interior cities already were developing into domestic aviation hubs and believed they could support international traffic.

"The trans-Atlantic case took over eight years to settle," said George Berry, commissioner of the Georgia Department of Industry and Trade and former aviation commissioner for the city of Atlanta. "It was basically an effort by the inland cities of Atlanta, Dallas and St. Louis to break the monopoly of the coastal cities and traditional ports of entry, such as New York and San Francisco, and their hold on international air service."

In 1977, the U.S. government permitted the interior gateways to have international service, which radically changed the character and the complexion of several of these cities.

In Atlanta, Delta Air Lines soon started flying to London and Frankfurt. Sabena, British Caledonian, Lufthansa and KLM soon



Swissair plane passes over an expressway on the company's first Atlanta flight.

followed and began flying nonstop to Atlanta. Today, Delta flies to Paris, Munich, Stuttgart and Shannon, Ireland. In addition, it began direct one-stop service to Tokyo in March after Japan Air Lines began Atlanta-Tokyo service last July. And Swissair just began to fly between Zurich and Atlanta in March.

"We could never have aspired to have over 1,000 international firms investing in our state if we did not have nonstop air service between Atlanta and the major European capitals and direct service to Tokyo," Mr. Berry said.

According to Mr. Murphy, the new interior gateways really could not have survived before

the late 1970s because of the size of airlines flying on international routes.

"In 1969, carriers began to introduce the wide bodies, the 747s, which had 400 seats. The increase in aircraft size absorbed all the growth," he said. "Between 1970 and 1980, I don't think there was any increase in frequen-

cy. And during most of that period of fairly high growth, no new gateways opened up. Since about 1980, the average seat size has leveled off so the increased growth has translated into increased frequency and new gateways."

"I don't think the new gateways took traffic away from the traditional gateways, but it has taken growth away," Mr. Murphy added.

Mr. Hawkins of Delta said the new gateways helped generate the growth in international air travel. "There's definitely been a stimulation of international traffic because of the interior gateways," he said. "I think people in the Southeast have felt more comfortable when they can leave from a gateway that they are familiar with."

Another trend also developed in the early 1980s — airline deregulation — which gave domestic carriers much more flexibility in choosing destinations, prices and traffic patterns.

Smaller airlines, which traditionally fed traffic into the more traditional gateways, began to create "hub-and-spoke" operations at other airports, such as Newark, New Jersey; Charlotte, North Carolina; and Salt Lake City.

Now those and other new gateways have generated enough domestic traffic through their feeder networks to where they believe they can support international service.

But unlike the deregulated U.S. market, international routes are still regulated through bilateral aviation agreements between the U.S. and foreign governments. When new bilateral agreements are reached, however, new gateways are often established, such as the recent accord between the United States and Britain.

That agreement permitted Piedmont Airlines and Delta Air Lines to fly nonstop to London from their respective hubs in Charlotte and Cincinnati.

Diane Peterson, director of international air service for the Airport Operators Council International Inc. in Washington, said that several other U.S. airports also desired to have international service because they believed it would bring an economic boost to their communities.

But she added, "the regulatory and negotiating climate is not particularly good" for the rapid establishment of many of these gateways.

New aircraft, however, make it more economically feasible for carriers to serve smaller, emerging markets. U.S. airlines have also asked the federal government for permission to fly smaller planes, with a seat capacity of around 200, on routes to Europe.

In addition, new planes are more fuel efficient and are being designed to fly longer distances, permitting nonstop service half-way around the world.

All these market and equipment changes are creating new interior gateways, however, are beginning to compete with the relatively young international gateways, such as Atlanta.

"It does open up a competitive situation," said Roy Cooper, vice president of economic development for the Atlanta Chamber of Commerce. "Before, we may have had it all to ourselves. Now we have a Charlotte to worry about."

Still, the Atlanta community has not opposed the establishment of new Southeastern gateways for international service. One reason is that the Hartsfield Atlanta International Airport has just been declared the busiest airport in the world, and it can afford to have some of its connecting traffic diverted to other airports.

"I don't think we are as dependent on the transfer traffic as we used to be," said John Braden, director of marketing for the Atlanta airport. "Atlanta needs its capacity more and more everyday for its own originating traffic. We are now almost to the point where we can sustain international service on our own because of the number of international companies doing business here."

Philosophically, Mr. Berry, the commissioner of Georgia's Department of Industry and Trade, supports the other Southeastern gateways.

"As far as I'm concerned, Atlanta and Georgia will never take the position that now that we've got ours, let's pull the ladder up," he said. "More power to Charlotte, Winston-Salem [North Carolina], Orlando, [Florida] in their efforts to secure international air service. I'm very satisfied that if the Southeast grows, that if the Charlestons, the Nashesvilles and the Jacksonville grow, that only strengthens Atlanta."

But the older gateways are responding to the more competitive market in other ways, according to Mr. Murphy.

"The major gateways — New York and Boston — are now beginning flights to the interior European gateways," Mr. Murphy said. "They are getting service to Munich, Dublin and Manchester."

A number of European carriers are becoming frustrated with the increased U.S. competition on both their home shores and in America. Because they do not have the benefit of a U.S. feeder network in smaller cities, they cannot justify flying to Charlotte or Cincinnati.

So European carriers are developing new ways to meet U.S. competition. For example, they are beginning to consolidate their service — equipment and routes — to the United States. The first test of such an arrangement was between British Caledonian and Sabena, which decided to jointly serve the Atlanta-London-Brussels route with daily 747 service last year.

European airlines also are seeking co-chairing agreements with smaller U.S. airlines whereby they can create their own feeder networks in the United States. For example, KLM is seeking to co-chair its flights with Florida Express Airline so that on the computer reservations system it will show that KLM has its own connecting flights from Atlanta to Florida.

"Interior gateways are going to develop as traffic continues to grow," Mr. Murphy said. "And the fact that aircraft size has pretty much leveled off and the range is getting longer, I think we will continue to see more demand for interior gateways."

MARIA SAPORTA is a business writer for The Atlanta Journal and The Atlanta Constitution.

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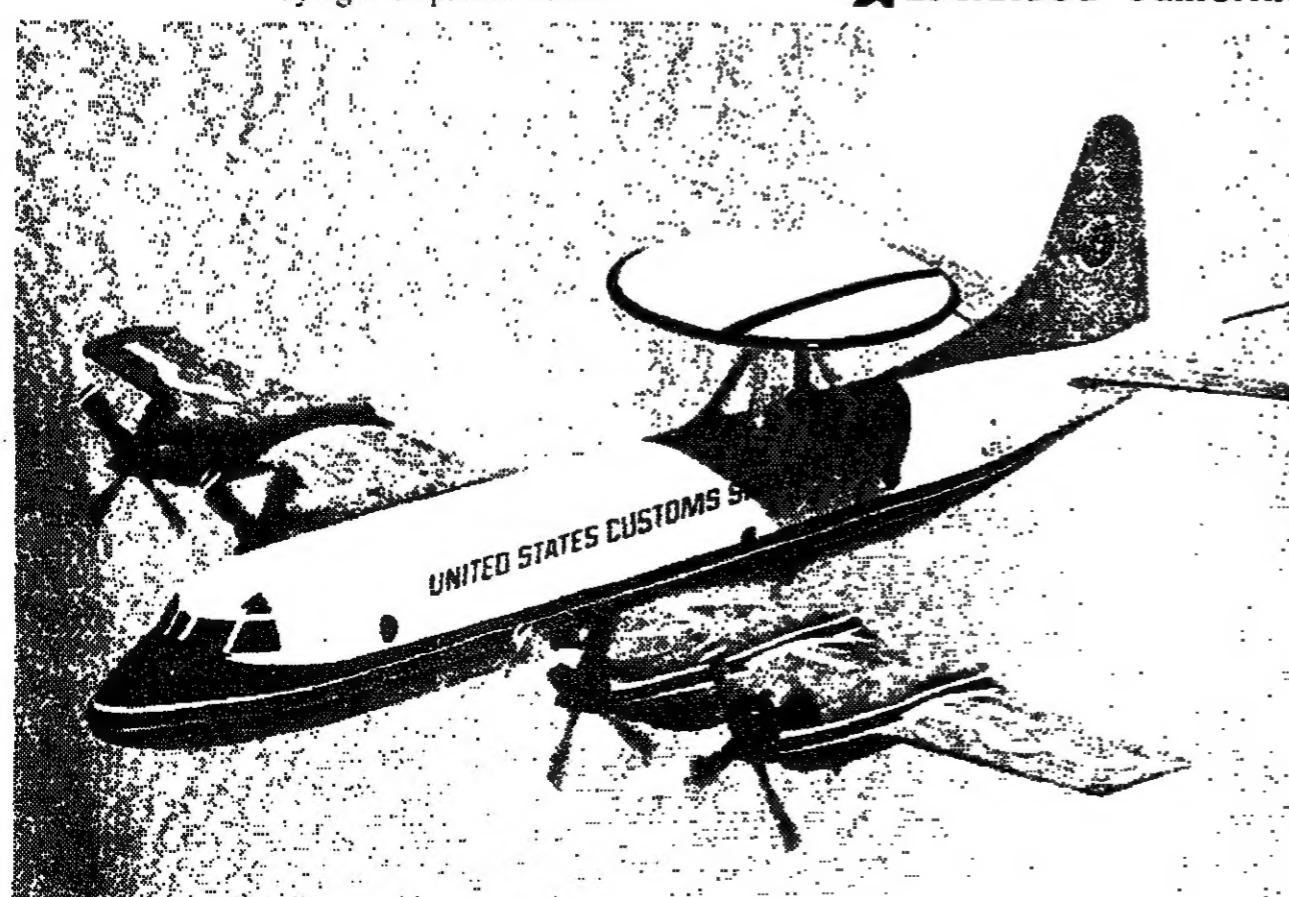
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Flying Into the Heart of London

By Peter Middleton

LONDON — On May 31, two 50-seat airliners touched down only six miles east of Tower Bridge, and less than 20 minutes by taxi from the Bank of England. They were making a trial flight into the new London City Airport, which is nearing completion on top of a derelict dock.

Once scheduled services begin from the airport in October, City workers should be able to reach Charles de Gaulle Airport in Paris faster than they can now get airborne from London Heathrow, according to Brymon Airways, one of the two airlines licensed so far to fly from London City Airport by the U.K. Civil Aviation Authority. Brymon claims that it will take less than two hours from office desk to disembarking from the aircraft in Paris.

Brymon will compete with Eurocity Express, a new and specially created subsidiary of British Midland Airways, between London City and Paris, Amsterdam and Brussels. Eurocity Express will also fly to Rotterdam and Düsseldorf, as well as offering domestic services between London City and Manchester, Jersey and Guernsey. Brymon will feed London City from its existing English West Country hubs of Plymouth and Newquay.

Non-British airlines may serve London City, subject to approval by the Civil Aviation Authority and bilateral government agreements on routes. None is seriously interested as yet, although provision for reciprocity exists on routes already approved.

If London's City workers choose to begin their journeys from their homes, however, it will often be quicker for them to fly from Heathrow or Gatwick, rather than from the new airport.

Nevertheless, the project's instigator, builder and operator — Mowlem Construction — is confident that within five years London City airport's proximity to one of the world's major financial centers will justify the design parameters of 1.2 million passengers per year, 10 aircraft stands and 130 movements — takeoffs and landings — per day. London City will also serve the industrial enterprise zone of which it is part.

Mowlem expects between 375,000 and 500,000 passengers to pass through London City in its first year of operation. Brymon, however, which has supported the project from its inception by Mowlem in 1981, predicts a maximum first-year total of 250,000, limited by availability of suitable aircraft.

Whatever the number of passengers, it will be minuscule compared with the capacity of major European international airports, allowing London City to guarantee fast turnarounds for time-conscious businessmen. Check-in

times are likely to be only 15 minutes, and conference facilities and stock exchange data displays will be provided for businessmen who will use the airport as a meeting place.

The £20 million (\$32 million) project was known initially as London Stobart, denoting short takeoff and landing, because its 2,500-foot (760-meter) runway is barely a quarter the length of those at major conventional airports.

London City will be the first of its type in the world to offer international services in competition with existing airports.

Other airports have been built in the hearts

of cities — the best-known are Kai Tak in Hong Kong and Tempelhof in Berlin. However, the closest parallel to London City is Toronto's downtown airport, from which short takeoff and landing de Havilland Canada Dash-7 aircraft fly domestic regional services. London City is based on the use of the same type of aircraft, which is powered by four turboprop engines.

The Dash-7, whose manufacturer is now owned by BAC, can operate with ease from the London City runway, which has been laid directly on top of an old wharf. The aircraft has been in service for nearly a decade and has been used in difficult geographic and weather conditions from Norway to Yemen. It has also performed reliably with Brymon on British regional routes.

Brymon stresses the training and experience necessary to operate the aircraft off short runways. The instrument landing system at London City will be set for a 7 degree approach slope rather than the 3 degree one used at conventional airports.

The Dash-7 is inherently quiet, climbs rapidly and descends steeply, so it leaves a small noise "footprint" on the ground. Besides being environmentally acceptable to the surrounding community, the aircraft also offers pressurized comfort and a reasonably quiet cabin for its passengers.

Europeans accustomed to an almost exclusive diet of jets between major cities will notice the difference, but none will be airborne in the four-abreast cabin for more than two hours. The Dash-7 cruises at 250 miles (400 kilometers) per hour and its flights will be limited to

400 miles, after which jet speed overcomes time saved on the ground.

Even this modest 400-mile radius gives London City access to a population of 150 million in the most highly industrialized and prosperous areas of Europe, as far as Dublin, Edinburgh, Bremen, Frankfurt and Strasbourg, although no carriers have yet applied to serve any of these destinations.

Much of the potential German business market, however, lies beyond 300 miles from London City, which Brymon considers marginal on time savings. This includes Düsseldorf, to which Eurocity Express already has traffic rights.

Eurocity Express wants to acquire British Aerospace-146 jets for London City services, which would greatly extend the market. The runway could be extended to take the 80-seat 146, which is the quietest and most agile jet airtanker on the market.

Before it could fly from London City, however, a proposed bridge across the river Thames to the east of the airport would have to be moved from the flight path. Not surprisingly, British Aerospace is supporting Eurocity's bid to have the bridge sited elsewhere. Air traffic control arrangements designed around the Dash-7 would also need revision.

Brymon expects two-thirds of London City passengers to be flying on business, and 60 percent of international traffic to originate in Continental Europe once the airport becomes well known.

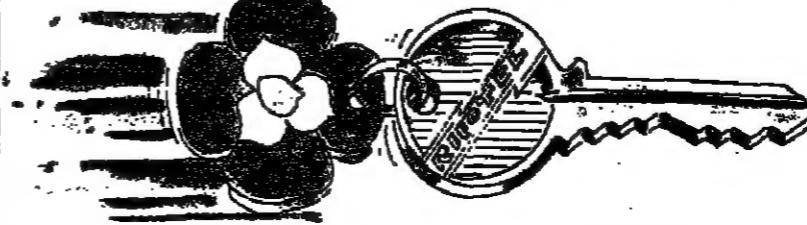
Brymon also predicts "split" traffic — British passengers flying to the Continent from London's Heathrow or Gatwick airports but returning to the office via London City. Some American tourists visiting London are also expected to use London City as a convenient gateway for day trips to the Continent.

The fins of Eurocity Express Dash-7s carry a pinstripe-suit motif to accentuate the carrier's dedication to business travel, and both of the airlines authorized to fly from London City are reducing seating on their aircraft from the standard 50 to about 44 to facilitate installation of hot-meal service. Business-class fares will be charged. Corporate and private aircraft will be banned from the airport.

The Dash-7 is likely to be the only type of aircraft flying from London City for several years. Eurocity Express acquired its first two aircraft recently and expects two more next March, with a fifth coming later. Brymon, the established British Dash-7 operator, expects to use three or four on London City services, out of a planned fleet of six.

PETER MIDDLETON is associate editor of Flight International magazine.

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Airbus and Boeing Raise the Stakes in Marketing Battle

Many analysts do not believe that the market can support three aircraft manufacturers competing with similar products.

By James D. Baumgartner

WASHINGTON — Two significant events took place last month in the escalating battle being waged by Airbus, Boeing and McDonnell Douglas to lure airline customers to buying their planes.

First, Britain and France raised the ante for government aid to Airbus by agreeing that loans to British Aerospace and Aérospatiale Airbus partners can be repaid by sales of A-330 and A-340 aircraft. Second, Boeing showed that it is willing to lend money to a favored customer to purchase Boeing aircraft.

These actions by a government-financed consortium and a cash-rich Boeing must have proved unsettling to McDonnell Douglas.

The move by the governments for the A-330/A-340 project followed protests earlier this year by the United States that the financing was being made at a risk to taxpayers. The A-340 is not due on the market until at least 1992, two years behind the competing MD-11 of McDonnell Douglas, the Boeing 747-400 and long-range, lengthened versions of Boeing's 767 that are already flying.

Boeing's loan to United Airlines of \$700 million in convertible notes raised expressions of concern from industry analysts in the United States. The transaction could give Boeing as much as a 16.9 percent stake in United if it exercised an option to convert the notes into stock.

Alan Bensouli, an analyst for Drexel Burnham Lambert, said Boeing should "not be using cash to finance customers," especially to the airline industry, which is "extremely cyclical."

That airframe companies are willing to go to such lengths to sell aircraft during a time when the airlines are on the "up" side of the cycle caused Mr. Bensouli to question to what lengths they would go when the carriers hit the "downside."

He said, "This is going to be hurtful to everybody involved." It shows, he added, that "this is an extremely competitive market even at a time that it should be a seller's market."

Many analysts do not believe that the market can support three aircraft manufacturers competing with similar products.

Airbus could be a victim of its own success with the A-320, with orders and options for more than 400 of the 150-seaters. It got the jump on both Boeing and McDonnell Douglas in offering the market a new-generation transport in this category. This will not be the case with the A-330/A-340 program, which not only will lag behind the McDonnell Douglas MD-11 but also the Boeing 747-400 and the long-range 767s.

However, Airbus believes that to compete successfully over the long term, it needs a family of aircraft to offer customers and to convince them that it is in business to stay. Also, the A-340 will be a more technically advanced aircraft than its competitors when it does hit the market. That means more in the past, when aviation fuel prices were high than it does now. While a newer technology aircraft will use less fuel, its development costs mean, or should mean, that it will cost customers more than a derivative aircraft.

The sales tactics of Airbus were the subject of talks earlier this year between the U.S. and European governments involved in the consortium. Aérospatiale of France and MBB of West Germany each hold 38 percent shares in Airbus, while British Aerospace has 20 percent. To U.S. charges that the companies have yet to refund any launch aid invested by European governments, they reply that the United States spends five times as much supporting various programs.

In a statement in January, Aérospatiale said that "some 70 percent of total sales for U.S. aerospace firms comes from government credits, as opposed to just 35 percent for their European counterparts." It said the "main source of funds that enable the U.S. aerospace industry to maintain a dominant position in world markets is none other than the American taxpayer."

Aérospatiale said that is "nothing short of indecent to claim that Europeans are



Aérospatiale's Airbus A-320 on the tarmac at Le Bourget.

| The Commercial Aircraft Market | | | |
|--------------------------------|-----------|--------|---------|
| Company | Delivered | Orders | Backlog |
| Airbus | 29 | 170 | 286 |
| Boeing | 238 | 335 | 662 |
| McDonnell Douglas | 91 | 164 | 261 |

cheating Americans out of their rightful jobs with each Airbus sale. Statements such as this can only be interpreted as reflecting American manufacturers' intent to move from a clearly dominant market share to a monopoly."

U.S. officials, in turn, say statements such as this are part of a smoke screen put up in Europe to hide Airbus subsidy practices.

"When we talk about government support for Airbus, we are very specific, and the Europeans want to talk about the entire aerospace industry," said an official from the U.S. Trade Representative's office.

"U.S. government funds flowing to the U.S. aerospace industry for the purchase of goods and services directed toward government are not a subsidy for civil aircraft programs. The Europeans, too, produce military goods which they sell to their own and foreign governments."

With such attitudes on both sides of the dispute, it is little wonder that the talks fell through.

The impetus to the talks follow what a McDonnell Douglas spokesman called a "major thrust at customers" we announced on Dec. 30 for the MD-11. This thrust was described as an "unfair trade tactic." Airbus denied trying to sell the A-340 to McDonnell Douglas customers below cost and said it "will continue to market it to any airline, whether or not the airline has publicly committed to the MD-11."

JAMES D. BAUMGARTNER is a senior editor of *Aviation Daily*.

Computerized Airliners Will Have Seatback TV

By Graham Warwick

LONDON — Within a few years, the airline passenger crossing the Atlantic will be able to watch the inflight movie not badly aligned and out of focus on a screen several seats ahead, but on a miniature television mounted on the back of the seat in front of him.

If he is flying first or business class, the passenger might find, mounted on the same seatback, a telephone with which he can call, via satellite, to ensure that his return flight is booked with the same well-equipped airline.

Seatback television uses the same liquid-crystal display (LCD) technology as digital watches, and for the same reasons. LCDs are slim, lightweight and consume little power. They require considerable development, however, before they can replace the cathode ray tube (CRT) displays used in the cockpits of modern airliners.

For that is the aim, to produce bright, sharp, full-color, flat-screen displays to replace bulky, power-hungry CRTs on the airline's flightdeck. The pilot might not notice the difference, but the aircraft designer and operator will benefit from the LCD's lighter weight and longer life.

Passenger telephones are simply an extension of established satellite communications technology, but require the development of ultra-sensitive antennas that provide good reception without incurring massive amounts of extra aerodynamic drag.

Already some airlines are planning to install business centers on their aircraft, linked by satellite to the terrestrial communications network. Hotel rooms, car rentals and theater tickets could all be booked from mid-Atlantic. Stocks and shares could be bought and sold from the comfort of an airline seat.

Passenger telephones are simply an extension of established satellite communications technology, but require the development of ultra-sensitive antennas that provide good reception without incurring massive amounts of extra aerodynamic drag.

Regardless of how this high-stakes battle shakes out for Airbus, it is causing apprehension on Wall Street for the two U.S. companies.

"Airbus has no shareholders to be accountable to," said Mr. Bensouli. "It is costing European governments money, but it is also employing 50,000 people. Airbus has been successful with the A-320, so they have to pay for the A-330/A-340 programs. I think Airbus will do what it has to do to get its share of the market. It has to get three models to compete with Boeing."

Boeing, Mr. Bensouli said, is a "giant" and may be able to afford to go on like that deal with United, but McDonnell Douglas cannot do this. What is going to happen when the airlines go into a down phase and do not buy planes? These companies should now be writing their own ticket in a seller's market but instead they are killing each other."

With such attitudes on both sides of the dispute, it is little wonder that the talks fell through.

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Interior view of an airplane cabin showing passengers and a flight attendant.

If the computer knows is unsafe, it can simply ignore his instructions.

If the aircraft is already near the stall, for example, the computer can prevent the pilot from inadvertently stalling the plane. This automatic limiting is a vital advantage in emergencies such as wind shear, where to escape the move down-draft the pilot must fly the aircraft to its limits and not beyond them.

The traditional mechanical linkages are not dispensed with lightly, however. When Airbus Industrie's fly-by-wire A-320 makes its public debut at the Paris Air Show, it will have no fewer than five flight-control computers, any one of which is capable of flying the aircraft.

This backup system is essential if the aircraft is to survive the failure of two or more computers, however improbable such an event might be. To prevent any common design flaw from causing all the computers to fail, two are designed by one company, three by another.

The next step is to make the computers tolerant of equipment failures and software faults, and that is Boeing's aim for its 777, unveiled at Paris as a competitor to the successful A-320. It will be 1993, however, before the 777 makes its flying debut at Paris.

On the ground, as well as in the air, there is an impending revolution. In particular, new radars that establish an information flow between aircraft and ground, and new ultra-accurate landing systems are to be introduced in the 1990s.

Anti-collision systems are being tested in the United States, where the dense air traffic and unique mix of heavy airliners and light private planes has in the past caused serious accidents.

The aim of all these systems is to ease congestion on the airways, freeing airlines to use fuel-saving direct routes. Unless the air traffic control system is upgraded to cope with the advances being made in the air, then airlines will see no benefits from the technology and the passenger will be faced with greater and greater delays.

GRAHAM WARWICK is technical editor on the weekly aerospace magazine *Flight International*.



We built these engines and they changed the world. A Pacific crossing shrunk to just six days, seven hours and 46 minutes.

And we kept on flying. Today we're working on a plane that will hop the Pacific in two hours flat.

The companies of United Technologies are working together to develop the hypersonic Orient Express. We're going to bring the world even closer with engines from Pratt & Whitney, advanced materials from Sikorsky, controls from Hamilton Standard and inspiration from the past.

UNITED TECHNOLOGIES

than they can handle. The FAA is trying to run the system up to the red line," Mr. Burnett told a Senate hearing in late May. "We don't need to play a game of chicken. We need to run the system on cold instead of hot.

Boston, New York, Chicago and Los Angeles, a third to half of the senior staff is eligible for retirement this year, and this time, with a more

perception — no matter how exaggerated — that airline travel is disintegrating into chaos, the proposal will figure as a major bar-

rier into space in the past 20 years and you ... cooperative with us.

U.S. Experience Provides Some Lessons for Europe

By Umberto Nordio

ROME—Deregulation, to all of us in the airline business, means airline deregulation, and we tend to regard it as though it were something peculiar to our own trade. In fact, air transport deregulation, as started in 1978 and 1979 in the United States, is just one instance in a wider, far-reaching worldwide trend moving away from command-and-control-type regulations to place instead reliance on a set of norms that focus on performance results, leaving industry free to find the most efficient way of achieving them.

An instant, global communication system and the increasing integration of world financial markets have enhanced international interdependence and spurred a growing awareness of the fact that the industrial nations of the world are moving toward a one-market economy.

Even the Soviet Union seems, of late, to have caught on to this concept and its implications, for in today's world scenario, military might can generate, at best, stalemates. Under the umbrella of such stalemates, victories are generated by economic strength, which can only be achieved through efficiency.

Air transport, by its very nature, always was an industry of worldwide breadth. In this trend toward a global, more competitive economy, airlines are quite naturally positioned in the forefront. When looking ahead, the American experience with airline deregulation provides us with a very significant lesson.

At times, in the day-to-day interaction between business and the media, a felicitous slogan captures the imagination of both reporters and readers. It becomes a cliché, and the commonplace quickly turns into popular wisdom. And, finally, it acquired professional status through the elaboration of some pundits who translates it into para-academic doctrine, just before facts consign it to oblivion.

Such was the fate of a catching industrial recipe broadcast about in the early 1970s: "Small Is Beautiful." Now, the first lesson to be drawn from American airline deregulation is that small may well be beautiful, but big is powerful, and bigness is what it takes for an airline to survive in a deregulated environment.

Nowhere in the world—except in the Soviet Union, where Aeroflot carries 125 million passengers a year—do we find airlines whose size approaches that of the U.S. "mega-carriers." Through their size, the U.S. carriers can now offer the customer some of the cheapest per-mile seats in the world.

Their size thus forces smaller carriers in the United States and abroad, to a momentous strategic choice: Should smaller carriers try to stay in the big league, competing with the giants in the global market, or should they accept downgrading and try to retain a safe niche in a local market?

The first option requires smaller airlines to embark on the road of associations, mergers or acquisitions, most likely reaching beyond the boundaries of their own countries. Just to mention one hurdle on this road, it must be remembered that existing legislation in most industrial countries, including the United States, sets tight limitations upon foreign shareholding in national companies engaged in air transportation of passengers and cargo.

The second option may involve painful, self-mutilating decisions, as local market niches in many cases may not provide enough room to accommodate the existing size of the smaller airline involved. And even when local

niches identify with the domestic market, they may not in the long run provide a safe haven. I, for one, believe that existing cabotage restrictions are bound to fall as the deregulatory process takes hold.

When trying to translate the American experience into a blueprint for European deregulation, it should be attentively weighed against the background of the existing European environment. Europe is not one but 21 countries, each with its own laws, norms, institutions, state agencies, procedures, traditions, habits, currency and national pride.

Most European countries have a history of pervasive state control or direct involvement in commercial and industrial enterprise, to an extent and through mechanisms that never existed on the American scene. Indeed, almost all European airlines are partly or totally owned by their respective governments. The stark, Darwinian process through which the U.S. mega-carriers emerged as survivors in the deregulated U.S. environment would, since its inception, meet with several obstacles in the European environment of today.

In Europe, extinction or mutation of a national airline would elicit strong protests from all the vested interests that in time have grown around it. Some political ear might become as sensitive to loss of jobs, displacement of industries, labor unrest as much as it had been to public thirst for cheap air fares. A suggestion might then follow again to rely on the old panacea of subsidizing the ailing airline so as to satisfy both vested interests and customers' expectations.

The Darwinian process would thus be thwarted. All existing national airlines would remain alive, but none of them would be an economic match for the U.S. mega-carriers. Ultimately, these would dominate the European market, as the various European governments would become fed up with throwing good money after bad to keep their carriers playing in a league where they would not belong.

The European airlines of today are weak because they are too many, too small, too diverging in their incompatible strategies. But they also command an element of potentially tremendous strength. They cater to a home market of 425 million people, 70 percent larger than the U.S. market.

In the United States, two Americans out of three are customers of the airline business. In Europe, the ratio is two out of 30. The traffic growth potential in Europe, thus, overwhelmingly exceeds that of the United States. The European airlines are sitting on a gold mine.

Whether this mine shall be exploited by European or non-European enterprise essentially depends on the European governments' foresight, adroitness and timeliness in handling the issue of European deregulation.

European deregulation should be guided in such a way as to avoid the pitfalls the Darwinian process might encounter in a European environment that was not prepared to absorb it or to accept it.

The concentration of productive resources into larger multinational companies as an instrument for achieving economies of scale and lowering costs should be actively assisted by the European governments through changes of laws, regulations, procedures, habits and mental attitudes. The road should be opened and paved for all market forces to play their role in shaping up a new European air transport supply system by a smaller number of competitive mega-carriers as well as a larger number of competitive European local carriers.

UMBERTO NORDIO is chairman of Alitalia.

A Sampling of European Air Fares

| Prices are for round-trip tickets and are for economy or special fares, not for business-class or first-class travel. | | |
|-----------------------------------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------|
| Carrier | Fare | Comment |
| PARIS-LONDON | | |
| Air France | \$ 302 | Economy. Unrestricted |
| Air France | 156 | Special Trip must include Saturday night. Can't change date. |
| Nouvelles Frontières | 108 | Charter |
| LONDON-AMSTERDAM | | |
| British Caledonian | 265 | Economy. Unrestricted |
| British Caledonian | 117 | Special Trip must include Saturday night. Can't change date |
| Virgin Atlantic | 117 | Economy. Unrestricted. Airport is Maastricht near Amsterdam. |
| LONDON-DUBLIN | | |
| British Airways | 312 | Economy. Unrestricted |
| British Airways | 149 | Special Trip must include Saturday night. Can't change date |
| Ryanair | 141 | Economy. Unrestricted |
| PARIS-ATHENS | | |
| Air France | 1,190 | Economy. Unrestricted |
| Air France | 432 | Special. Trip must include Saturday night. Can't change date. |
| Nouvelles Frontières | 237 | Charter flight |
| PARIS-TOULOUSE | | |
| Air Inter | 241 | Economy. Unrestricted |
| Air Inter | 113 | Special. Must be under 25 or over 65 or traveling with family on certain dates. |
| Nouvelles Frontières | 63 | Special. Advance purchase required. Penalty if cancellation. Only four flights a week. |

Calls Increase For Regulation

Continued from page 9

Air, People Express and parts of Frontier Airlines. But two airlines increasingly work in tandem.

In January 1987, the two airlines announced new discount pricing, a move rapidly followed by the other major airlines. Later, when American Airlines and United Airlines made tentative moves to increase prices, Continental also turned down by refusing to follow.

At the same time that Texas Air was seizing the mantle of low-cost leader, it was also drawing an increasing number of consumer complaints along with other airlines.

In April, the Department of Transportation received 2,103 consumer complaints about airline service, up from 1,650 in the same month a year before. The largest number of complaints were about Continental, which also had the highest rate of complaints per 10,000 passengers.

Continental has questioned the validity of the survey, because it was based on passengers who take the time to write about poor service rather than being based on random survey techniques. But, at the same time, the airline has conceded that the difficulties of combining three airlines resulted in service problems.

Continental can dominate pricing because of a low-cost structure that allows the airline to fly profitably at fares that cost the other airlines money. Its key advantage is low labor costs, resulting from a largely nonunion work force.

Continental's labor-cost advantage has put considerable pressure on other airlines to reduce their labor costs.

"There's one massive difference between the costs of different airlines in 1987," said Robert L. Crandall, American Airlines chairman and president. He noted that American's labor cost per available seat mile is 2.6 cents, while Continental's is 1.4 cents. "Multiplied by the number of available seat miles we provide each year, that amounts to a \$600 million labor-cost difference."

The Department of Transportation has asserted that competition under deregulation remains healthy, pointing to continuing price competition. New carriers can still spring up to challenge established carriers if fares get too high, according to deregulation's advocates.

In addition to competing with fares, frequent flyer programs and, increasingly, claims about the quality of service, airlines in today's deregulated environment are competing through a system of hub-and-spoke operations.

A pattern has emerged in which airlines dominate passenger services at individual airports that have been transformed into hubs, where many flights converge.

The idea behind a hub is simpler: to maximize the airline's traffic. An airline might not be able to justify more than one flight a day from city A to city B. It might, however, be able to justify eight flights a day from city A to its hub, where passengers could get on flights to 30 different ultimate destinations, including city B.

Many major airports serve as the hub for more than one carrier. For instance, United and Continental both use Dulles International Airport, which serves the metropolitan Washington, D.C., area, as a hub. However, mergers have virtually eliminated competition in a hub in some cases. For instance, Northwest Airlines, after its merger with Republic Airlines, controlled 79.1 percent of the market at Minneapolis-St. Paul.

The hub-and-spoke system and a huge increase in the number of airline passengers that has resulted from deregulation have put increasing stress on U.S. airports. In the first nine months of 1986, U.S. passenger airlines flew 278.3 billion revenue-passenger miles, more than twice the number for all of 1970.

Airlines have responded by putting increasing amounts of capital into airport additions and redesign.

MARLETT M. HAMILTON is a Washington Post reporter, who covers transportation for the Business section.

Effects of EC Deregulation On Fares Remains to Be Seen

Continued from page 9

ing competition in air transport. It particularly wants a new transparency in the way the airlines set fare prices.

The package would eliminate secret fare-fixing between the big flag carriers, which has in effect excluded small, new airlines from competing on major routes. It would also improve the access of these new airlines to routes, so that instead of being largely restricted to regional routes between provincial airports, they would be able to compete on feeder routes between regional and hub airports.

It also lays down new capacity sharing limits to prevent the major airlines from operating cartel-style "open pools" in which they split seats and revenue 50-50 on important routes such as London-Paris.

A three-year trial period has been initiated under which airlines can only split capacity 45-55 for the first two years, and only 40-60 for the third year. At the same time, revenue-sharing pools are being curtailed so that the amounts that can be transferred may not exceed 1 percent of an airline's sales turnover on that route.

The idea is that the 1 percent ceiling is just enough to compensate an airline for losing a certain number of passengers and revenue to their pool partners but not enough to constitute a cartel. In any case, EC officials point out that 50-50 "open pools" are in fact comparatively rare, and that the majority of "limited pools" in existence transfer less revenue than 1 percent of route turnover

The national airlines will, meanwhile, be given block exemptions from the new competition rules to enable them to agree on timetables and operate collective check-in and baggage handling facilities.

There remains, however, one vital reform that will decide the real scope of airline deregulation in Europe. It revolves around the so-called fifth freedom that would allow non-national carriers to compete on an intra-European route. In other words, this would permit an enterprising independent airline—say one of the new British, French, Dutch or Irish carriers—to base in on protected routes like Frankfurt-Rome or Brussels-Copenhagen and challenge the national airlines.

Once that right is won, the EC Commission expects to say, air fares around Europe will plunge. Until then, they predict that progress on deregulation will be slow but sure.

It was precisely the question of the fifth freedom that deadlocked last week's EC transport ministers' negotiations in Luxembourg. Greece, Spain, Italy and Denmark were reportedly opposed to reforms that would permit foreign airlines to challenge their carriers for business on domestic routes.

National pride and sensitivity in Europe make airline liberalization politically difficult. Yet the degree of deregulation under negotiation is modest by U.S. standards.

"I would say our package will achieve about 40 percent of the effect of the American deregulation," commented a senior Brussels official.

The aircraft that has never seen an airport before is as advanced as the new Gulfstream IV. We're bringing it to the Paris Air Show.

Early in 1983, we said we were going to design, build and deliver the Gulfstream IV, a new generation of ultra-luxury Gulfstream executive jet transports.

At the same time, we also said that nothing in the world would be so advanced in performance, systems and size. It would be revolutionary.

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Today, the Gulfstream IV is in production and soon to enter service with the world's most advanced regional governments, certified to the strictest regulations of the U.S. Federal Aviation Administration.

And everything about the aircraft and its systems is superlative.

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Gulfstream Aerospace Corporation, P.O. Box 2205, Savannah, Georgia 31402

In U.S., Travelers Decry Flight Delays, Overbookings, Poor Service

By Martha M. Hamilton

WASHINGTON — Glamour, excitement, convenience. Those are some of the words that air travel conjured up in the 1960s.

But mention air travel today, and the words most likely to come to mind are unprintable.

For those whose work requires them to spend a lot of time on airplanes, frequent-flier bonuses have become a form of reparations. One member of Congress recently inaugurated what he calls the "frequent losers" club for victims of bad air service.

Airline passenger complaints to the Department of Transportation in May were nearly three times what they were a year earlier. The department, noting that deterioration has proposed rule-making that would require air carriers to provide data about on-time performance, baggage handling, telephone reservations, misconnections, denied boarding and cabin amenities.

Even before the new complaint statistics came, Transportation Secretary Elizabeth Hanford Dole warned the airlines to clean up their acts or face possible enforcement action.

Air travel horror stories are easy to come by. All you need to do is say "airline" in a crowded room.

There is the New York bond trader who spent a night asleep on a baggage carousel at Chicago's O'Hare Airport after a series of delays resulted in his flight arriving after all connecting flights had departed.

There is the former U.S. senator, James G. Abourezk, who is suing New York Air — which is now part of Continental Airlines — for false imprisonment for refusing to let him leave an aircraft on the runway at Washington National Airport after hours of delay.

And there are countless passengers who have found their flights delayed by equipment problems,



Mention air travel today, and the words most likely to come to mind are unprintable.

air traffic control or even the failure of the airline to produce a crew for the planes.

Peggy Watts Cup, a product manager with Bell Atlantic's marketing department, traveled to Newark in March. At the end of the day, she returned to the airport, got a boarding pass for the 4 P.M. Continental Airlines flight to Washington and went to the

lounge area. The area already was full of passengers waiting for a delayed 3:30 flight to Boston, and she and others waited with increasing impatience as 4 P.M. came and went without announcement or any information about the prospects for departure.

At 4:30, the Boston-bound passengers were told to go to another gate, she said. Shortly afterward,

the plane arrived. But instead of loading the passengers who had been waiting for the 4 P.M. flight, the airlines posted the 5 P.M. flight. "All the 4 o'clock people went crazy," she said.

Ultimately, a Continental manager persuaded the New Jersey New basketball team, which was holding tickets on the 4 P.M. flight, to give up their seats and take a later flight, she said. The remaining 4 o'clock people were then boarded with the 5 o'clock passengers, "but we got all the middle seats and the smoking section," she said. "As far as we could see, there was never a plane there" for the scheduled 4 P.M. departure, she added.

In April and May, Continental led the major U.S. airlines in the number of consumer complaints filed and in the number of complaints per 100,000 passengers. Last month, Continental, which is part of Texas Air Corp., registered 21.39 complaints for every 100,000 passengers.

Next on the list was Eastern Air Lines, also a Texas Air subsidiary, which had 10.11 complaints per 100,000 passengers. Together the two airlines accounted for about half of the complaints filed that month.

Continental has said that problems resulted when Continental absorbed New York Air and People Express in February and that performance is improving.

The mergers that have characterized the airline industry in recent years are certainly partly to blame for the service problems. As airlines have struggled to combine work forces and facilities, consumers often have suffered the consequences.

Increased traffic also has contributed to heavy strains on equipment, staff and airports. Lower fares have attracted passengers who never could afford to fly before and helped changed the nature of the industry.

Flight problems, which include delays and overbookings, continue to be the biggest source of com-

plaints. According to the Federal Aviation Administration, during 1986 an average of 1,144 flights a day were significantly delayed, FAA figures, which count only arrivals and departures delayed by more than 15 minutes after a pilot's request for clearance, seriously underestimate the problem, according to airline executives.

AIRLINES are also finding other ways to anger passengers, according to the Department of Transportation. Recurrent complaints include allegations that the

airlines are painfully slow to pay refunds and baggage claims or that they don't always play fair with passengers who give up their seats on oversold flights.

In addition, "some carriers appear to be dealing inadequately with nonsmoking passengers who check in after the predesignated no-smoking section is full," the department noted.

The Transportation Department also urged airlines to provide more information about fare policies and suggested that airlines may be boarding flights and pushing back from the gate knowing

that the aircraft cannot take off.

"Sitting on the aircraft is far less comfortable for passengers than waiting in the terminal. It also prevents passengers from investigating potential travel alternatives," the department noted.

Several members of Congress have proposed cracking down on airlines for still another source of complaints — what they say are misleading ads promoting deep discount fares that are so limited in number that they are virtually unobtainable.

Air travel is no longer an en-

Crisis Grows Among Controllers

We need to run the system on cold instead of hot.

By Laura Parker

OKLAHOMA CITY — The Air Traffic Control Academy, where the country's air traffic controllers are trained, occupies a corner of a sprawling complex on the Oklahoma range, far from the din of Washington's congressional hearing rooms.

Since 1981, when 11,400 of the country's air traffic controllers were fired by President Ronald Reagan for striking illegally, the Federal Aviation Administration has been screening about 3,000 new controllers at the academy every year.

The academy is only the first hurdle in an education that takes three years to complete. This spring's "graduates" won't be fully trained until 1990. The trouble is, they are needed today.

The air traffic control system, born in 1936, is still struggling to recover from the strike.

The showdown in 1981 could not have come at a worse time. The airlines, newly deregulated three years earlier, were just beginning to expand. Now, six years after the strike, there are fewer controllers with less experience handling more traffic. Last year, controllers handled 6.4 million flights, a million more than in 1980, the year before the strike.

"There is a tendency for the FAA to want people to think they have rebuilt the system," said Jim Burnett, chairman of the National Transportation Safety Board. "It is not rebuilt yet."

Now with flight delays up 25 percent over 1985, and controllers still working overtime, the signs of stress are in full bloom.

Last month the National Transportation Safety Board — an independent federal agency that acts as a safety watchdog over the transportation industry — warned that the air traffic control system was being stretched too thin. The five-member board said that the safety is compromised to such a degree that the FAA should reduce the number of commercial flights in overcrowded airports during the peak summer travel season.

As evidence, the board cited a rise in errors made by controllers and the number of reports of near-collisions, both on the ground and on runways. Mr. Burnett said that controllers, in some cases, are being asked to direct more airplanes than they can handle.

"The FAA is trying to run the system up to the red line," Mr. Burnett told a Senate hearing in late May. "We don't need to play a game of chicken. We need to run the system on cold instead of hot."



Students at the air traffic school in Oklahoma City learn spatial reasoning.

We need to build in a margin of safety."

The FAA rejected the safety board's recommendations, and with them, the notion that the safety of air travel is somehow

a supervisor at the Washington Air Traffic Route Control Center.

"We're heading into thunderstorms."

To further complicate the problem, training lags in some centers because controllers who are supposed to be teaching the new trainees are too busy directing air-traffic.

The FAA chief, Donald D. Engen, contends that airline travel today is safer than at any time in the history of aviation. The FAA further argues that it already limits the number of flights taking off and landing at crowded airports — a practice that accounts for much of the flight delays.

"We will not allow the situation to become critical," said Mr. Engen.

Against that backdrop, the debate between Congress and the FAA over the number of controllers needed rages on. Lately, it has become so convoluted that it is difficult to determine which set of statistics most resembles the reality in the field.

TRANSPORTATION Secretary Elizabeth Hanford Dole says the ever-increasing number of evidence that the rebuilding of the system is "practically complete."

But Representative Norman Y. Mineta, the California Democrat who chairs the House Public Works aviation subcommittee, complains that the number of fully-trained controllers has actually gone down because retirements are out-pacing the tripling of new recruits. And he says the FAA is inflating its numbers by including the clerks in its count.

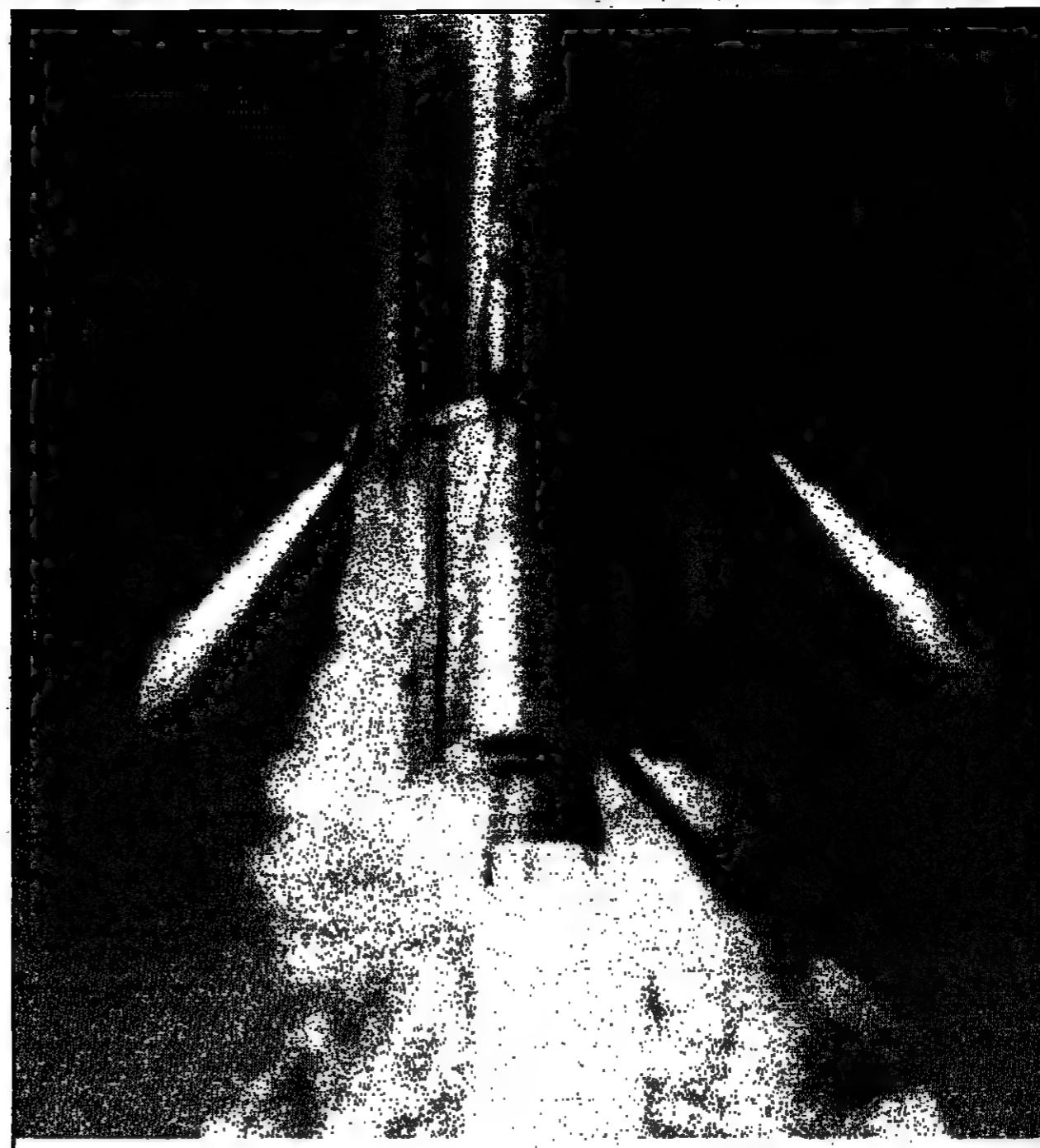
In 1981, at the time of the strike, there were 16,500 air traffic controllers around the country. Today, there are about 15,100, including about 2,474 trainees and 1,460 air traffic clerks, who do clerical work and do not control airplanes.

To add to the dilemma, senior controllers are retiring at a rate of about 500 a year, and at the air control facilities near Washington, Boston, New York, Chicago and Los Angeles, a third to half of the senior staff is eligible for retirement this year.

"It's the experience level we're worried about," said Vic DePaula,

gaining tool in any debate over controller hiring.

LAURA PARKER is a Washington Post staff writer who covers the transportation industry.



Atlas/Centaur has a new thrust

If you are among the select group of satellite owners looking for a smooth, on-schedule, cost-effective ride to orbit, we've got the thrust you need.

We'll boost your confidence.

Since the early 1960s, Atlas/Centaur has launched 67 spacecraft, including 37 communication satellites, with unsurpassed reliability. Our extremely accurate inertial guidance ensures precise orbital placement, extending your spacecraft's operational life.

We let you call the shots.

By flying on Atlas/Centaur you avoid the threat of preemption by another higher-priority mission. Also, yours will be the only payload on your flight. We will be ready to go when you are. Our business and insurance arrangements are very flexible.

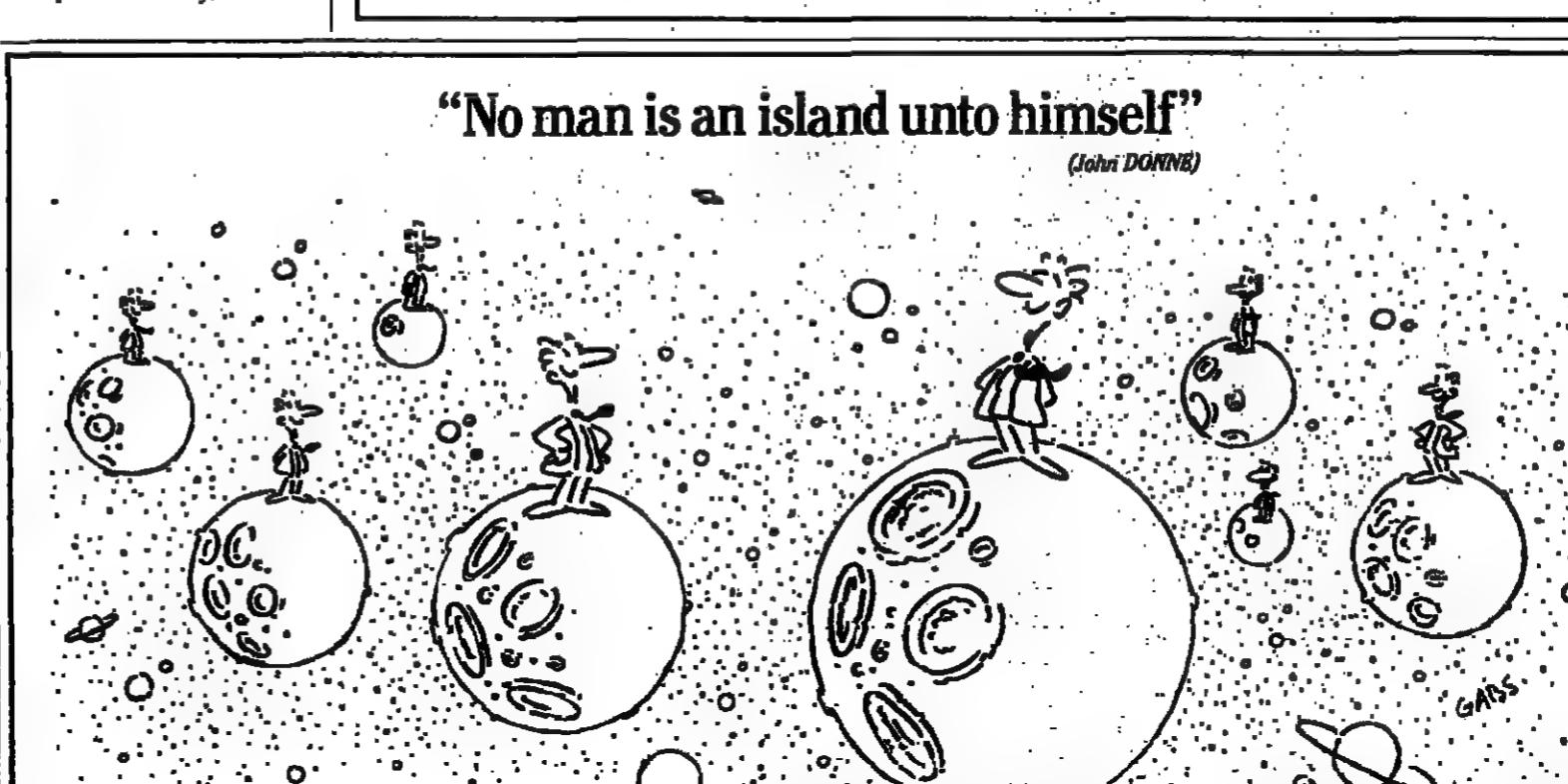
We give you the best ride for your money.

We are determined to be cost competitive in the commercial market so that you can be too. We are investing in new facilities and long-lead items to meet your needs. We are the first with authority to use government facilities to build and launch our vehicles.

We have openings.

Although we have reservations booked, you can still get aboard Atlas/Centaur early... and put our new thrust behind your payload.

GENERAL DYNAMICS
Space Systems Division



We pride ourselves on having partners all over the place in space: around us, above us, below us. For we're not the ones that carry the most weight. There are — brace yourself, now — some 1,400 men and women who work at Matra Espace. Only 1,400. Just think of it. But, you see, when we look out into space, straight ahead, what does it matter, on that scale, whether you're 1,400 or 14,000 strong? All the more in that we never imagined going where we're going all by ourselves.

So, we've concentrated on the kind of things our ambitions placed within our grasp: things like ideas, brain power, intelligence, research, creativity, invention, innovation, science, looking ahead... in short, everything that's needed to open the doors to cooperation.

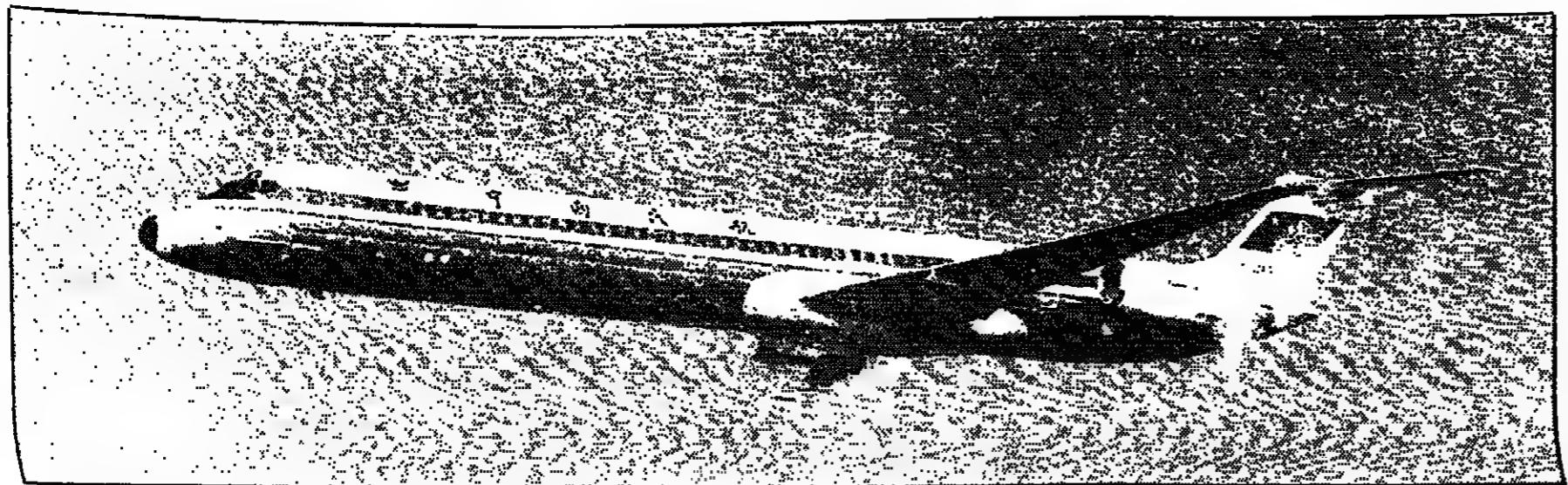
At Matra Espace, our hearts swell with pride when Ariane carries aloft our vehicle equipment bay, responsible for command-

ing each and every function of the launcher. Occasionally, when we're feeling particularly brazen, we tell ourselves that it may well be the equipment bay that carries Ariane aloft, but, then again, we're not going to start compromising our good relations with our partners on account of a little vanity.

That's a constant preoccupation with us: whether we're the principal contractor or simply a participant, we don't let ourselves get carried away by words. We cooperate, that's all. Period.

Because, during the 25 years we've worked with partners more powerful or less powerful than ourselves, space has taught us something. A law of space. Here it is: in order to succeed, you have to cooperate. On this score, consult the list of everything Matra has sent into space in the past 25 years and you'll see: no one is more cooperative than us.

MATRA ESPACE
Together
we'll make space ours.



A McDonnell Douglas Super 80 belonging to the fleet of CAAC.

China's Market Adds Mobility to the Economy

By Peter Middleton

ONDON — Lack of foreign exchange and the quest for the transfer of Western technology through joint ventures and license production dominate the Chinese aerospace market. But, despite the clamp-downs that followed the nation's 55 percent rise in imports during 1985, acquisition of multimillion-dollar airliners from overseas is still tolerated at the highest government levels because mobility is a catalyst of industrial expansion.

Sole purchasing authority for civil airliners, with one minor exception, is the Civil Aviation Administration of China (CAAC). This government organization combines the roles of aviation ministry, airport authority and state airline, although it is gradually giving operating autonomy to its domestic regions, which, in name at least, already claim separate airline status.

Aircraft account for only a small percentage of Chinese domestic transport today, but anyone who has traveled by Chinese railways knows why CAAC is in the process of quadrupling its capacity this decade. China is bigger than the United States and Mexico combined. The author endured one 600-mile (970-kilometer) train journey for 34 hours.

Punctuality is not a hallmark of CAAC either, but its traffic leaped by about a third during 1984 and 1985 — the year it ordered 50 new aircraft — and its growth is now scheduled to stabilize at about 15 percent a year until the end of the current national economic plan in 1990. No other major airline is contemplating such growth, twice that planned for the Chinese economy as a whole, but few have such a poorly served market.

CAAC carried 10 million passengers last year (up from about 7.5 million in 1985), but the 1.27 billion revenue ton-kilometer it generated were less than a quarter of those flown by British Airways, whose national population is one-twentieth the size.

Most growth is on domestic routes, of which CAAC has 253, plus eight to Hong Kong.

Traffic on the 27 international services is growing at only 5 percent, so the primary need is for more 150-seat twin jets and equipment to upgrade the airports to which they fly. This includes navigation aids, air traffic control systems, weather monitoring equipment, communications and reservation systems.

Like the rest of the world, CAAC goes in-hand to Boeing for 747s, including three of the new 747-400s, but it has acquired an unusually wide variety of other modern equipment. This ranges from Boeing 737s and 767s (with 757s on order), through McDonnell Douglas MD-80s and Airbus A-310s to Tupolev Tu-154s, which are based only in the northwest near the Soviet border, suggesting political rather than technical motivation for their acquisition in a barter deal.

Early CAAC equipment was almost exclusively Soviet until the 1980 rift, after which Britain seized the opportunity to sell Tridents. More recent British sales to CAAC include British Aerospace's regional jets and Shorts 360 turboprops.

Understandably, CAAC has been wary of Chinese-built airliners, and only recently released 14 local derivatives of the Soviet An-24 turboprop from cargo and charter duties for scheduled passenger services.

To enhance its credibility and to acquire export potential for a modernized version, Chinese industry has contracted the Hong Kong Aircraft Engineering Company, a sister company of Cathay Pacific Airlines, to help it westernize the aircraft with new avionics and interiors. The resulting 50-seat Yun-7-100 is in production at Xian against CAAC orders for 40, and stretched variants will be built. Significantly, the Chinese market has been closed to competing imports.

A much bigger cooperative deal is the \$1 billion joint venture between McDonnell Douglas and the Chinese Aero Technology Import/Export Corporation to assemble 25 MD-80 jet airliners for CAAC in Shanghai, with 15 options to follow, and a potential domestic market for at least 100. Delivery of the MIG-19 has produced the A-5 Fanian

which is far superior to the original. Both the F-7 and A-5 have had some export success, notably to Pakistan, which is taking 60 advanced F-7Ms fitted with Western avionics.

The Chinese have also had to resort to Western help — this time from the U.S. Air Force — to upgrade the avionics of their big F-8 fighter. The USAF is integrating the entire navigation and weapon-control system of the aircraft, and will supply kits for 50 under a \$550 million contract.

Meanwhile, following the U.S. shuttle disaster and problems with Europe's Ariane rocket, China has gained a toehold in the satellite-launching market. Long Wall Industries has obtained launch contracts for the world's only secondhand communications satellites, which were lost by one shuttle then recovered by West Germany's MBB.

Most Western helicopter manufacturers have made direct sales of craft into the potentially huge Chinese aerial-work market, but only in small numbers. Tasks include offshore oil support and aerial seeding of new forests to stem the easterly migration of the Gobi desert. The most recent demonstration tour was conducted by Boeing Vertol, which hopes to sell a few heavy-lift Chinooks for installation of hydroelectric power lines.

China has built old Soviet helicopter designs for many years and, as part of the overall plan to acquire technology as well as to prevent imports, it has already produced more than 50 French Aerospatiale Dauphin helicopters, called Z-9s. Local content is now above 80 percent, and the Z-9 will become totally Chinese by 1989.

China is also seeking overseas partners for co-development of light-and-medium-lift helicopters, but has built its own heavy-transport type, known as the Z-8. This looks suspiciously like the Super Frelon — an old design by Aerospatiale whose Gazelle lightweight missile-armed antitank helicopter recently won a Chinese military order against U.S. and West German competition.

Chinese jet combat aircraft have mostly been straight copies of pre-1960 Soviet types, such as the F-7 fighter (MiG-21) and H-6 bomber (Tu-16), but a major redevelopment of the MiG-19 has produced the A-5 Fanian.

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Aerospace is part of both processes. Increasingly, China is looking for participation rather than purchase.

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The two satellites will be re-orbited by Long March-3 rockets for the American companies that bought them from their British insurers. The first should be in orbit again next year, provided the U.S. government approves their temporary "export" to China for the launch. This is not guaranteed, because the satellites contain some very high-technology equipment.

China launched its 19th satellite last year, and its success rate — including two out of three geosynchronous communications satellites — is creditable. At least 17 out of 21 launches have achieved their objectives.

China is believed to be quoting \$35 million to \$60 million per geosynchronous launch, compared with \$80 million to \$95 million for Ariane bookings placed today.

Launching space rockets is a difficult way to earn foreign currency. Tourism is easier. Already nearly 1.4 million overseas tourists are bringing in more than \$1 billion a year. Visitor totals are expected to reach three million by 1990 and five million by the end of the century.

More tourists will require more airliners. So will the travel demands of a billion Chinese, as long as industrial momentum can be sustained.

Aerospace is part of both processes. Increasingly, China is looking for participation rather than purchase.

Proposed FAA Rules Worry Foreign Firms

By James D. Baumgartner

WASHINGTON — Sometime this fall, the Federal Aviation Administration is expected to ask for comments from commercial aviation interests on whether foreign companies should be allowed to maintain and repair U.S.-registered transport aircraft. The agency provoked a worldwide outcry last year when it gave notice that such work would not be permitted.

This in effect, would mean that Airbus Industrie or British Aerospace or Rolls-Royce or MTU could not work on the aircraft or engines or parts they sold to U.S. airlines. Large maintenance facilities established by such carriers as British Airways and Lufthansa also would not be allowed to work on U.S. aircraft. Foreign companies faced the loss of millions of dollars in lucrative repair and maintenance contracts.

The FAA notice also created a great deal of alarm in the United States, where many airlines were flying foreign aircraft or engines and were faced with the prospect of having no one to maintain them. However, the FAA ignored the criticism, saying it was acting in the interest of air safety. Many thought the agency was acting in restraint of trade.

It was not until John Moore, the British secretary of state for transport, visited Elizabeth Hanford Dole, the U.S. secretary of transportation, in April that some relief from the FAA notices was promised.

Mrs. Dole ordered the FAA to conduct a rule-making on the issue, which means that the concerned industries will get a chance to comment before the FAA develops a policy on foreign repair and maintenance. Many still fear the agency, however, will use the rule-making procedures merely as a pretext to carry out its original intention.

Among the nations that have objected to the FAA notices are Belgium, Denmark, West Germany, the Netherlands, Portugal, Spain, Sweden and Britain. Most of the large foreign flag carriers have protested as have the International Air Transport Association (IATA), the U.K. Civil Aviation Authority (CAA) and the Association of European Airlines.

The CAA, for example, said that the "zone" of the FAA notices "clearly infers, by the onerous limitations applied, that components from foreign sources, including the U.K., are to a lower order of safety, an inference which the CAA cannot accept as justified."

The legality of the notice was questioned by IATA, which said that for the past 37 years, the FAA has "without limitation or hindrance, knowingly authorized foreign repair stations to work and has permitted them to work on U.S.-registered aircraft as long as such aircraft, engines or parts were at least partially used in operations outside the U.S."

"The practice in the industry has included the transporting of internationally used aircraft, engines and parts to foreign repair stations for the purpose of performing inspections or maintenance. These practices have not been

covert, but have existed under the watchful but acquiescent eye of the FAA."

IATA also said that under U.S. law, "such long-standing practices have effectively established an informal rule authorizing such practices which cannot now be rescinded without compliance with the notice and comment procedure" of the U.S. Administrative Procedure Act.

The U.S. State Department, however, backed the FAA. In a letter drafted for several nations, the State Department said the FAA notices were "motivated strictly by a desire to ensure the highest possible standards for U.S.-registered aircraft within the limits of FAA budgetary resources. They are neither arbitrary nor intended to influence or restrain trade in goods or services."

The State Department disagreed that the

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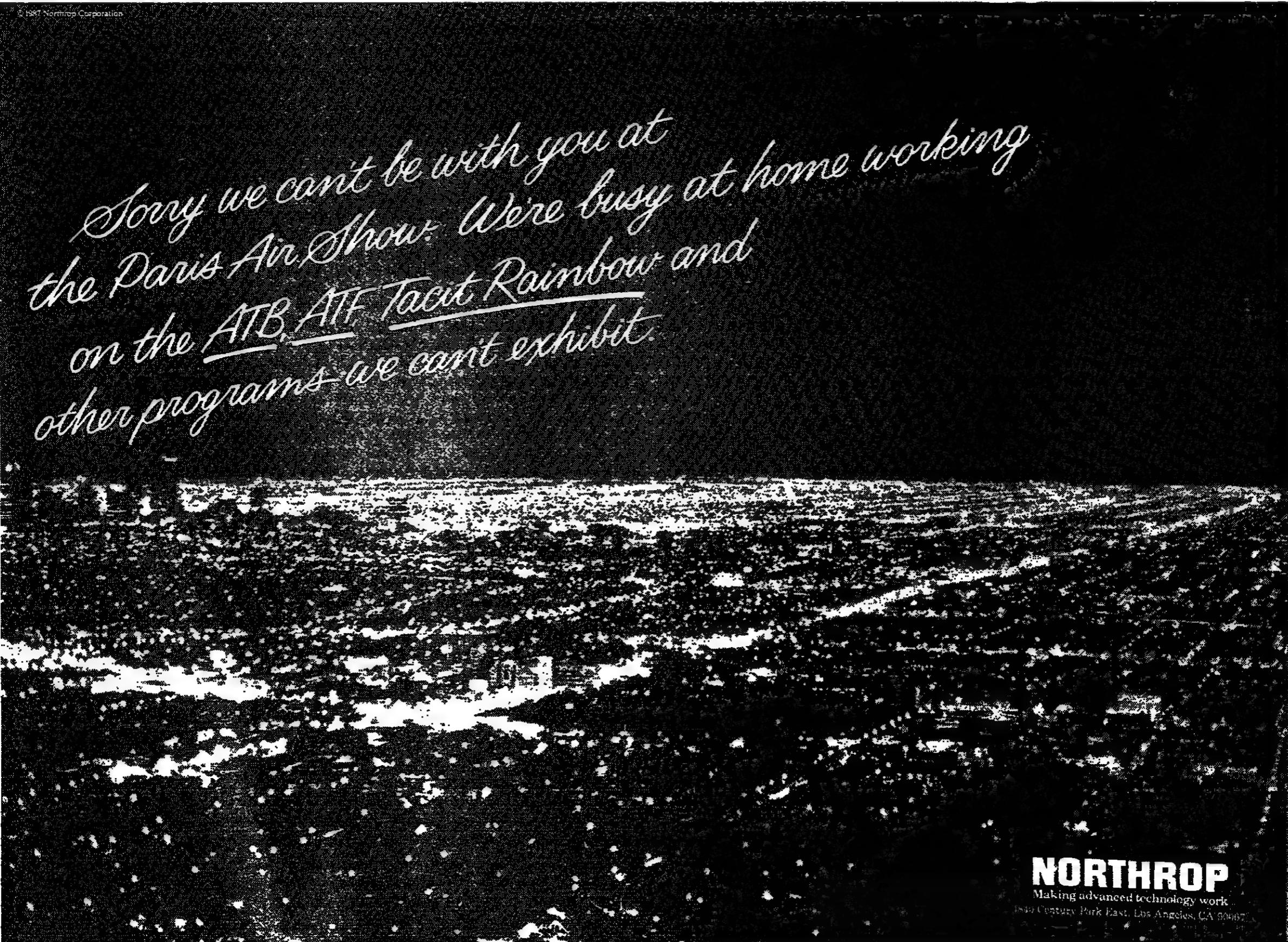
polices "would have commercial effects inconsistent with the goals of the GATT Agreement on Trade in Civil Aircraft and the Agreement on Technical Barriers to Trade."

An official of Amsterdam Schiphol-East, however, said that the "moves seem to be contrary to the mutual cooperation and reliance between FAA and the European authorities which we have been trying further to develop in recent years."

The Association of European Airlines said that the "proposed restrictions on foreign repair station work bear no reasonable relationship to safety" and that the FAA in the notice had conceded that foreign repair stations are "qualified to perform work on U.S.-registered aircraft."

MTU, the German equipment company that has many airline customers including Pan Am, Eastern, KLM and Air France, said the notice would "impose highly restrictive new limitations on the authority of MTU to perform work on U.S.-registered aircraft."

MTU said that "given that many foreign aviation interests regard FAA's proposed actions as having primarily a domestic economic, rather than a safety, justification, countermeasures by foreign civil aviation authorities are certainly possible."



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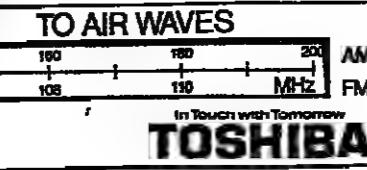


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EUROBONDS

Dollar's New Strength Makes Little Impression on Market

By CARL GEWIRTZ
International Herald Tribune

PARIS — The dollar firmed on currency markets last week, buoyed by a continuing reduction in the U.S. trade deficit and a slowdown in the rise of wholesale prices. But the improvement had little impact on the Eurobond market, where foreign investors remained wary of taking on any new exposure in dollars.

Money managers said they believed the dollar would hold at around current levels, at least in the near future. They are impressed by the Federal Reserve's recent willingness to raise interest rates and by the coordinated intervention by central banks to support the dollar.

But money managers question how far the Fed's designated new chairman, Alan Greenspan, will be able or willing to go in raising rates if the need arises. They question, as well, the capacity of central banks to go on accumulating dollars at the record rate set in the first quarter of the year.

In any event, even if the Fed supports the currency by raising rates, this will be bad news for the bond market as prices must drop as rates rise.

While currency dealers were clearly impressed with the reduction in the U.S. merchandise trade deficit — as were bond dealers, who immediately marked up their prices — investors said they were skeptical about whether the improvement can be sustained to a degree that eliminates the threat of longer-term dollar depreciation.

The defensive posture was best illustrated last week by General Motors Acceptance Corp.'s sale of \$200 million with an exceedingly short maturity of only two years — the only classic straight-dollar debt that was marketed. Prices on such short-dated paper are much less volatile than longer-term paper.

Even so, a number of the banks that traditionally underwrite GMAC issues doubted there was enough demand and turned down the invitation from Union Bank of Switzerland to join the syndicate. The paper was offered to underwriters at a yield of 55 basis points, or .55 percent, over the yield on comparably dated Treasury notes. The price dropped and the yield widened to 65 basis points but by week's end was back to offering level.

There was a burst of late week activity in the sterling sector once it became clear that Margaret Thatcher had been returned to office with an impressive majority. However, the new issues — from Swedish Export Credit, Amro Bank and Banca Nazionale del Lavoro — were priced aggressively on the anticipation that British interest rates will be cut.

But both the pound and the sterling bond market were buffeted by profit-taking in the aftermath of the general election, leaving the new issues trading at discounts outside the fees paid to underwriters.

There were six new Australian dollar bonds launched last week, but most traded at substantial discounts. Dealers complained that the volume was too big for the limited demand, and they were especially critical of the terms on Eurofima's issue — a long maturity of seven years and a coupon that was too low.

Eurofima also tapped the Euroyen market, again at aggressive terms: with coupon and offering price on its seven-year paper virtually equal to those set by the State Bank of Victoria on a five-year issue.

The market for equity-linked paper remained buoyant last week with the Japanese continuing as the biggest issuers. Bankers reported increased interest in the Japanese companies that are most reliant on exports. These had been shunned because of the yen's appreciation but are coming back into favor as the exchange rate stabilizes.

The most notable of last week's issues was from Mitsubishi Chemical, which set a record low coupon of 1 percent on its \$200 million of five-year notes, down from the 1½ percent that had initially been indicated. Despite the coupon cut, the paper ended the week at a premium of 8½ percent.

Chemical companies are the current vogue on the Tokyo stock exchange as the appreciation of the yen has substantially reduced the cost of oil imports priced in dollars.

Like all the Japanese companies issuing equity warrant bonds, Mitsubishi Chemical swapped the proceeds from the dollar bond into yen. Instead of paying interest on the yen swap, the Japanese are able to use low-cost dollars to generate income, receiving interest in yen — in this case reported to be in the area of 2½ percent — from the counter-party wanting such low-cost dollars.

Bankers report that the premium pricing on Japanese equity warrant bonds during the syndication period needs to be looked at with some suspicion. They say that lead managers often artificially manipulate the when-issued price to a substantial premium to justify a later reduction in the coupon. Once the issue

See EUROBONDS, Page 17

Currency Rates

| June 12 | | | | | | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cross Rates | | U.S. | | D.J.A. | | F.J. | | I.M. | | G.M. | |
| | | U.S. | U.S. | D.J.A. | D.J.A. | F.J. | F.J. | I.M. | I.M. | G.M. | G.M. |
| American | 1.51 | 2.288 | 2.288 | 112.67 | 112.67 | 25.27 | 25.27 | 8.1564 | 8.1564 | 134.16 | 134.16 |
| Brussels (a) | 1.79 | 2.75 | 2.75 | 2.625 | 2.625 | 2.625 | 2.625 | 16.49 | 16.49 | 25.66 | 25.66 |
| Frankfurt | 1.792 | 2.985 | 2.985 | 2.824 | 2.824 | 2.824 | 2.824 | 1.25 | 1.25 | 4.01 | 4.01 |
| London (b) | 1.625 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.501 | 2.501 | 2.675 | 2.675 |
| Milan | 1.625 | 2.6170 | 2.6170 | 2.6170 | 2.6170 | 2.6170 | 2.6170 | 2.6170 | 2.6170 | 2.6170 | 2.6170 |
| New York (c) | 1.6251 | 2.6165 | 2.6165 | 2.6165 | 2.6165 | 2.6165 | 2.6165 | 2.6165 | 2.6165 | 2.6165 | 2.6165 |
| Paris | 1.625 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 | 2.59 |
| Tokyo | 1.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| Zurich | 1.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| I.B.C. | 1.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| I.S.D.R. | 1.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |

Changes in London and Zurich, relative to other European centers. The New York rates of 4 P.M. (EST) are commercial rates; (a) amounts needed to buy one pound; (b) amounts needed to buy one dollar; (c) units of 100; (x) units of 1,000; (r) units of 10,000. N.G. not quoted; N.A. not available; (—) less than 1/100. Source: 1/100. I.S.D.R. 1/100.

Other Dollar Values

Currency per U.S. Dollars, market rates, June 12.

Source: Interbank (Brussels); Banca Commerciale Italiana (Milan); Banque Nationale de Paris (Paris); Bank of Tokyo (Tokyo); IMF (SDR); BAI (London, Riyad, Bahrain); Oesterreichische (Vienna); Other data from Reuters and AP.

Last Week's Markets

All figures are as of close of trading Friday

| Stock Indexes | | Money Rates | | United States | | June 12 | | June 5 | | C/D's | |
|---------------|-----------|-------------|----------|---------------|--------|---------|--------|--------|--------|--------|--------|
| United States | June 12 | June 5 | C/D's | U.S. | U.S. | U.S. | U.S. | U.S. | U.S. | U.S. | U.S. |
| D.J. Indust. | 2,372.73 | 2,324.15 | + 2.22 % | 134.00 | 134.00 | 134.00 | 134.00 | 134.00 | 134.00 | 134.00 | 134.00 |
| D.J. Util. | 2,027.77 | 198.64 | + 2.58 % | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| D.J. Trans. | 1,025.53 | 294.39 | + 2.14 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| S & P 100 | 301.62 | 290.45 | + 2.07 % | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| S & P 200 | 349.12 | 345.52 | + 2.52 % | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| S & P Ind | 169.25 | 165.49 | + 2.65 % | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 | 2.625 |
| NYSE Co | 2,167.27 | 2,129.50 | + 2.22 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| British | 2,289.59 | 2,228.80 | + 2.72 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| FTSE 100 | 1,767.90 | 1,729.50 | + 2.30 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Japan | 25,894.27 | 25,271.20 | + 2.67 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| West Germany | 1,755.00 | 1,749.50 | + 0.35 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Swiss | 1,329.88 | 1,364.33 | + 2.14 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| World | 47.30 | 46.40 | + 2.23 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| MSCI | 47.30 | 46.40 | + 2.23 % | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |

International Credit Lenders

EUROBONDS

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By CARL GEWIRTZ
International Herald Tribune

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New International Bond Issues

Compiled by Laurence Desvillettes

| Issuer | Amount (millions) | Mkt. | Coup. | Price | Price | Term |
|-------------------------------------|-------------------|--------|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | % | and | per | week |
| FLOATING RATE NOTES | | | | | | |
| TOPS Series IV | \$130 | 1992 | 0.15 | 100.10 | 100.00 | Over 4-month Libor. Noncallable. Fees 0.15%. Denominations \$250,000. |
| HMC Mortgag Notes I | £150 | 2017 | 14 | 100 | 99.50 | Over 3-month Libor until 1997 or until pool of mortgages is amortized, whichever comes first. Interest will be 14 over Libor thereafter. Average life 7 years. Callable at par in 1997. Fees 0.60%. Mortgagel backed bonds in denominations of £100,000. |
| FIXED-COUPON | | | | | | |
| General Motors Acceptance Corp. | \$200 | 1989 | 8 1/4 | 100% | 99.98 | Noncallable. Fees 1.95%. |
| Council of Europe Retirement Fund | DM 150 | 1997 | 6 1/4 | 113 1/4 | — | Noncallable. Each 5,000-mark note with 10 two-year warrants, each giving the right to buy 2500 of 1,300 marks per dollar. Break-even rate 1.94 marks. Fees 1.95%. |
| Amsterdam-Rotterdam Bank | £50 | 1992 | 9 1/4 | 101 1/4 | 99.38 | Noncallable. Fees 1.95%. |
| Banca Nazionale del Lavoro (London) | £50 | 1992 | 9 1/4 | 101 1/4 | 99.38 | Noncallable. Fees 1.95%. |
| Swedish Export Credit | £50 | 1992 | 9 1/4 | 101 1/4 | 99.50 | Noncallable. Fees 1.95%. |
| Swedish Export Credit | ECU 50 | 1994 | 7 1/4 | 101 1/4 | 99.50 | Noncallable. Fees 1.95%. Denominations 10,000 ECU. |
| Deutsche Bank Finanz | CS 100 | 1992 | 9 1/4 | 101 | 99.90 | Noncallable. Fees 1.95%. |
| Royal Trustco | CS 100 | 1992 | 10 1/4 | 101 1/4 | 99.23 | Noncallable. Fees 1.95%. |
| Christiania Bank | Aus 30 | 1990 | 14 1/4 | 101 1/4 | 99.13 | Noncallable. Fees 1.95%. |
| Eurofima | Aus 75 | 1994 | 13 1/4 | 101 1/4 | 99.13 | Noncallable. Fees 2.5%. |
| Nederlandse Gasunie | Aus 75 | 1989 | 14 1/4 | 101 1/4 | 99.63 | Noncallable. Fees 1.95%. |
| NordLB Finance (Cuxhaven) | Aus 50 | 1991 | 13 1/4 | 101 1/4 | 99.85 | Noncallable. Fees 1.95%. |
| Sanwa Australia Leasing | Aus 30 | 1992 | 14 1/4 | 101 1/4 | 98.75 | Noncallable. Fees 2.5%. |
| Vigontio Dominion (Australia) | Aus 50 | 1990 | 14 1/4 | 101 1/4 | 100.00 | Noncallable. Fees 1.95%. |
| Federal Business Development Bank | NZS 50 | 1989 | 18 1/4 | 101 1/4 | 99.75 | Noncallable. Fees 1.95%. |
| Denmark | Y 10,000 | 1991 | 8 | 115 1/4 | — | Noncallable. Fees 1.95%. Denominations 10 million yen. |
| Eurofima | Y 20,000 | 1994 | 4 1/4 | 101 1/4 | 99.75 | Noncallable. Fees 1.95%. |
| State Bank of Victoria | Y 30,000 | 1992 | 4 1/4 | 101 1/4 | 99.88 | Noncallable. Fees 1.95%. |
| EQUITY-LINKED | | | | | | |
| Canon Sales | \$100 | 1992 | 1 1/4 | 100 | 100.00 | Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of 2,153 yen per share and at 143.40 yen per dollar. Fees 2.5%. |
| Daikin Danchi | \$100 | 1992 | 1 1/4 | 100 | 99.00 | Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of 1,189 yen per share and at 143.45 yen per dollar. Fees 2.5%. |
| Glory | \$60 | 1992 | open | 100 | 99.00 | Coupon indicated at 14%. Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of an expected 26% premium. Fees 2.5%. Terms to be set June 15. |
| Hokuriku Bank | \$100 | 2002 | 1 1/4 | 100 | 103.00 | Semiannual. Convertible at 1,400 yen per share and at 142.85 yen per dollar. Fees 2.5%. |
| Konica Paint | \$60 | 1992 | open | 100 | 99.00 | Coupon indicated at 14%. Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of an expected 26% premium. Fees 2.5%. Terms to be set June 15. |
| Matsuya | \$50 | 1992 | open | 100 | 100.50 | Coupon indicated at 14%. Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of an expected 26% premium. Fees 2.5%. Terms to be set June 15. |
| Mitsubishi Chemical Industries | \$200 | 1992 | 1 | 100 | 108.50 | Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of 1,200 yen per share and at 142.85 yen per dollar. Fees 2.5%. |
| Nikken Chemicals | \$50 | 1992 | open | 100 | 98.50 | Coupon indicated at 14%. Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of an expected 26% premium. Fees 2.5%. Terms to be set June 15. |
| Pacific Dunlop | \$75 | 1997 | open | 100 | 99.00 | Coupon indicated at 6 1/4 to 7%. Convertible at an expected 20 to 25% premium. Fees 2.5%. Terms to be set June 17. |
| Tokyu | \$150 | 1992 | open | 100 | 106.00 | Coupon indicated at 14%. Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of an expected 26% premium. Fees 2.5%. Terms to be set June 15. |
| Toyo Sash | \$100 | 1992 | 1 1/4 | 100 | 100.50 | Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of 1,463 yen per share and at 142.40 yen per dollar. Fees 2.5%. |
| Victor Co. of Japan | \$100 | 1992 | 1 1/4 | 100 | 105.00 | Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of 2,778 yen per share and at 143.35 yen per dollar. Fees 2.5%. |
| Victor Co. of Japan | \$50 | 1994 | 2 1/4 | 100 | 102.00 | Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of 2,778 yen per share and at 143.35 yen per dollar. Fees 2.5%. |
| Bell Group | £75 | 1997 | open | 100 | 98.50 | Coupon indicated at 9%. Redemable in 1992 to yield 8%. Convertible at an expected 20 to 25% premium. Fees 2.5%. Terms to be set June 19. |
| Texaco | ECU 80 | 1992 | open | 100 | 98.00 | Coupon indicated at 14%. Noncallable. Each \$5,000 note with one warrant exercisable into company's shares of an expected 26% premium. Fees 2.5%. Terms to be set June 18. |
| WARRANTS | | | | | | |
| National Australia Bank | 0.10 | 12 mos | — | \$20 | — | Call warrants exercisable at par into an Australian dollar-denominated bond paying 1.45% and due 1992. |

EUROBONDS: Doubt on Dollar

(Continued from first finance page) is priced and moves to the secondary market, the premium frequently disappears.

Banks also report that last week's fiasco with the Minebea issue is likely to ensure that two banks are never again given the task of syndicating bonds bearing identical terms in different markets.

Although Daiwa Securities had indicated it would proceed with marketing \$100 million of Minebea paper in the Asia dollar market at a slightly higher coupon than on the Eurodollar bond that Nomura Securities had canceled, Daiwa subsequently also withdrew the issue — leaving both firms red-faced.

As first structured, Minebea's \$100 million Eurobond was to carry identical terms to the \$100 million

loan offered in Asia. However, as trading is much more active in London than in Singapore, the bulk of the \$200 million issue was sold in London — putting Nomura in the position of either supporting the price at a big loss and bailing out Daiwa, or abandoning the issue.

Daiwa, in announcing it would continue at a higher coupon, canceled the initial issue — and all the trading that had taken place — rather than simply adjust the indicated coupon. In the end, even this did not work and Daiwa also threw in the towel.

Victor Co. of Japan gave two competitors, Nomura and Yasuichi, mandates to run simultaneous Eurobonds. But these are not identical issues, as one is for five years and the other for seven. Both ended the week at modest premiums.

The one limitation is that banks providing the credit must have access to domestic francs, meaning the participating banks must have a presence in France. However, this is not a tremendous hurdle.

Credit Lyonnais and Chase Manhattan, arrangers of the facility, reported that more than \$500 million was raised in syndication from around 45 banks. Just over half the total subscriptions came from non-French banks.

Given the size of the oversubscription, the commercial banks were asked to take — \$15 million for lead managers, \$10 million for co-managers and \$5 million for co-managers — will be sharply reduced.

In addition to drawing on the credit, Hachette can use it as a backup facility for the issuance of short-term paper. Four banks, Morgan Guaranty, Chase, Swiss Bank Corp. and Crédit Commercial de France were named as dealers to distribute Euro-commercial paper. Another four, Crédit Lyonnais, Banque Nationale de Paris, Société Générale and CCF, were named to distribute domestic commercial paper.

The success of the Hachette loan, bankers say, assures that other French companies will use the formula to tap the market.

In the Euro-CP market, Belgium, which earlier this year announced a program of unframed securities, issued its first paper. The \$28 million was issued for three months at a cost of

Hachette's Flexible Credit Gains Strong Support

By Carl Gewirtz
International Herald Tribune

"less than 10 basis points below Libid," the London interbank bid rate, according to a Belgian official, who refused to be more specific.

High-grade sovereign debt currently fetches from 8 to 10 basis points or hundreds of a percent above Libid. Belgium's ability to better than Libid is believed to be a function of its scarcity value. However,

INTERNATIONAL CREDIT

ever, that should evaporate, as the government expects to have \$200 million of CP outstanding by end-

of summer and \$300 million by the end of the year.

In the syndicated loan sector, Whirlpool Acceptance Corp. is setting up a \$150 million, five-year credit on which it will pay 125 basis points over Libid and a utilization fee of 5 1/2 basis points if more than half is drawn. The commitment fee on undrawn amounts is 7/8 basis points.

The Canadian subsidiary of South Korea's Hyundai Motor Co. is seeking a \$100 million, nine-year credit to help finance the construction of a paper mill in Scotland. Lloyd's Bank is arranging a leasing finance of \$85 million and a syndicate of banks led by Union Bank of Finland will provide up to \$165 million in guarantees. Interest on the guarantee facility will be 14 percent, with a commitment fee of 4 percent on unused amounts.

Montagu is also arranging a \$50 million loan for Equitacorp, to finance the Australian company's

purchase of 28 percent of Guinness

of Britain. The three-year loan will bear interest of 8 1/4 basis points over Libid. The commitment fee on undrawn amounts is 1 1/2 percent and underwriters are being offered front-end fees of up to 7/8 basis points.

Montagu and Citicorp have agreed to underwrite a loan of around \$100 million to finance part of the proposed \$460 million takeover by WPP Group, a British marketing company, of JWT Group, the giant U.S. advertising firm.

If the takeover is completed, the banks will begin syndicating the credit, which is expected to carry a spread of 2 1/4 to 2 1/2 points over Libid.

NAMES: The Allegis Syndrome

(Continued from first finance page)

any corporation contemplating a new name, Mr. Lubliner said. "Most companies are better off staying with what they have and using it in more intelligent and creative ways," he said. One suggestion: changing the company logo to make it more contemporary.

Even before the Allegis upheaval, there were signs that the recent bombardment of bizarre new corporate names — Unisys, Omnicom, USX and UNUM among them — was making many chief executives think twice about changing their companies' names.

That's good advice for almost

U.S. Consumer Rates

June 12

The following rates

Monte Carlo 20-Year Index

Montgomery 20-Year Index

Money Market Funds

Morgan Stanley 20-Year Average

Bank Rate Monitor Index

Home Mortg. 20-Year Average

Source: New York Times.

benefits accounted for more than half of all exports, in dollar terms, from Mexico under the program.

Officials here said the trade benefits were withdrawn in retaliation for what the United States perceives as inadequate protection offered by Mexico to intellectual property rights. Specifically, they said, the United States is irritated by the slowness with which Mexico is moving to recognize patents on pharmaceutical and chemical products and processes.

Mexico is the third-largest trading partner of the United States, after Canada and Japan. Mexican exports to the United States reached \$17.7 billion in 1986, while Mexican imports amounted to \$12.5 billion, according to U.S. statistics.

For Mexico, the United States is its largest trading partner. Just over two-thirds of Mexican imports come from the United States, and 62 percent of its exports go to the American market. The United States is also the largest foreign investor in Mexico, with \$10.1 billion,

or 60 percent of all foreign investment.

Officials said the U.S. side was using the talks to press Mexico to ease investment regulations. One Mexican official said that "this is the most politically sensitive area" of the negotiations, in view of Mexico's historical suspicion of foreign investment.

In a speech in Mexico City on May 20, Charles J. Pillion Jr., the U.S. ambassador to Mexico, said negotiators were seeking not a trade and investment framework agreement

that would provide "a more formalized mechanism" to handle whatever issues might arise.

Mexico is seeking language in the agreement that would shield it from what government officials here have called discriminatory U.S. trade practices. One Mexican official close to the negotiations estimated that "40 percent of our manufactured goods already have some difficulty in access to the American market" and said he feared further restrictions.

GESTION OBLI-YEN S.A.

Société Anonyme 10A, boulevard Royal, LUXEMBOURG

AVIS AUX PARTICIPANTS DE OBLI-YEN

CONVOCATION À L'ASSEMBLÉE GÉNÉRALE EXTRAORDINAIRE

Les participants de l'Obli-Yen sont priés d'assister à l'Assemblée Générale Extraordinaire qui se réunira le mardi 30 juin 1987 à 15 h 30 afin de délivrer, dans le cadre de l'article 36.2 de la loi luxembourgeoise sur les organismes de placement collectif, sur l'ordre du jour suivant:

<

NASDAQ National Market

OTC Consolidated trading for week ended Friday

UK Consolidated trading for week ended Friday, June 12

Mutual Funds

Figures as of close of trading Friday
June 12

| NEW YORK (AP)— | Bid | Ave |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|
| the following quotations, supplied by the National Association of Securities Dealers Inc., are the prices at which these securities could have been sold (not issued, delivered or bought) during the regular trading session Friday. | | |
| ComGr | 12.71 | |
| Elinc | 12.23 | |
| Galco | 19.80 | |
| Hillyd | 13.15 | |
| Itspre | 17.22 | |
| USGovt | 14.87 | |
| Canfield | 8.72 | |
| Calvert | 11.19 | |
| Calvert Growth Fund | | |
| Armed | 17.80 | |
| Equity | 22.90 | |
| Inco | 14.16 | 16.16 |
| Social | 24.30 | 27.70 |
| T-151 | 10.50 | |

| Bid | Ask | | TxF Lo | 15.25 | NL | Mining | 9.37 | 1.81 | Prudential | 10.31 | NL |
|-------------|-------|----|-------------------|-------|-------|------------------|--------|-------|---------------|-------|-------|
| ARP Invst: | | | MS Gov | 14.92 | 15.20 | Farmli | 15.78 | 1.91 | Evin | 12.95 | NL |
| CashGr | 26.13 | NL | WashA r | 21.07 | NL | Faren | 19.46 | 20.81 | Glob | 12.95 | NL |
| GenInv | 15.47 | NL | Carnegie Funds: | | | Farms | 59.47 | NL | GPIF | 10.92 | NL |
| GenInv | 15.47 | NL | Govt | 9.78 | 10.24 | Farm EG | 15.57 | NL | IMCI | 11.66 | NL |
| GenInv | 15.27 | NL | CashGr | 14.60 | 14.93 | Federated Funds: | | | GPIF | 9.82 | NL |
| TIF Inc | 24.30 | NL | CapTR | 11.30 | 11.63 | FBF | 9.39 | NL | RBkR | 12.03 | NL |
| TIF Inc | 24.30 | NL | Cardnl | 14.84 | 15.51 | FedCsh | 10.47 | NL | FundTrust: | | |
| TIF Inc | 24.30 | NL | ChancGr | 9.06 | 9.55 | Each | 57.55 | NL | Agrf | 15.42 | NL |
| TL Midwest: | | | Cat Shs | 19.78 | NL | FET Inv | 25.35 | NL | Grf C | 14.85 | NL |
| TL Midwest: | | | Cat Dir | 12.43 | NL | Folint | 9.81 | NL | Groint | 14.05 | NL |
| TIF Govt | 10.29 | NL | Chestnut | 83.49 | NL | Floot | 9.93 | NL | HYInv | 9.90 | 10.31 |
| TIF Govt | 10.29 | NL | ELIGMA Funds: | | | GNMA | 70.77 | NL | Incof | 10.35 | NL |
| TIF Govt | 10.29 | NL | Growth | 14.77 | 15.02 | Gwth | 18.40 | NL | Goberil | 13.74 | NL |
| TIF Govt | 10.29 | NL | HvYld | 11.95 | NL | HyYld | 10.41 | NL | Gocca | 24.90 | NL |
| TIF Govt | 10.29 | NL | HyYld | 11.20 | NL | IMCI | 10.24 | NL | GIT Invst: | | |
| TIF Govt | 10.29 | NL | Incom | 7.81 | NL | IMFT | 10.20 | NL | Esac | 18.81 | NL |
| TIF Govt | 10.29 | NL | Munib | 7.36 | 7.75 | IMT | 10.22 | NL | HyYld | 10.83 | NL |
| TIF Govt | 10.29 | NL | Value | 14.36 | 15.12 | IMT | 10.20 | NL | Incn | 10.23 | NL |
| TIF Govt | 10.29 | NL | Citibank IRA-CIT: | | | IMT | 10.24 | NL | InARI | 10.43 | NL |
| TIF Govt | 10.29 | NL | Balanc | 1.71 | NL | IMT | 10.24 | NL | Gorring | 11.48 | NL |
| TIF Govt | 10.29 | NL | Equity | 1.20 | NL | IMT | 10.24 | NL | Ghwo | 15.45 | NL |
| TIF Govt | 10.29 | NL | Incom | 1.71 | NL | IMT | 10.24 | NL | Global: | | |
| TIF Govt | 10.29 | NL | St Trm | 1.26 | NL | IMT | 10.24 | NL | Europ | 22.48 | 21.40 |
| TIF Govt | 10.29 | NL | Claremont Fost | | | IMT | 10.24 | NL | Intl | 22.13 | 22.34 |
| TIF Govt | 10.29 | NL | GovBd | 10.42 | NL | IMT | 10.24 | NL | Japan | 24.21 | 25.41 |
| TIF Govt | 10.29 | NL | Stock | 12.19 | NL | IMT | 10.24 | NL | Pacific | | |
| TIF Govt | 10.29 | NL | Comdib | 13.79 | NL | IMT | 10.24 | NL | | | |
| TIF Govt | 10.29 | NL | Clesser | 44.34 | NL | Congrs | 12.22 | 13.59 | | | |
| TIF Govt | 10.29 | NL | Colonial Funds: | | | | | | | | |
| TIF Govt | 10.29 | NL | AGold | 29.48 | 31.83 | Confid | 101.55 | NL | Gen Elec Inv: | | |
| TIF Govt | 10.29 | NL | CalTR | 4.82 | 7.16 | Civics | 14.00 | NL | Elinin | 16.79 | NL |
| TIF Govt | 10.29 | NL | CapCsh | 48.67 | 51.00 | CTAR | 10.53 | NL | ElinTr | 22.07 | NL |
| TIF Govt | 10.29 | NL | CapCsh | 47.42 | 48.40 | Ed Inc | 10.53 | NL | ElinTr | 10.40 | NL |
| TIF Govt | 10.29 | NL | CapCsh | 8.57 | 9.10 | Europ | 14.44 | NL | S&S | 40.82 | NL |
| TIF Govt | 10.29 | NL | CapCsh | 16.91 | 17.86 | Each | 77.14 | NL | S&S Lp | 11.21 | NL |
| TIF Govt | 10.29 | NL | Fund | 19.48 | 21.08 | Fidel | 18.16 | NL | GSecr | 12.95 | NL |
| TIF Govt | 10.29 | NL | GovMts | 14.47 | 14.14 | Field | 5.93 | NL | GenT&E | 13.41 | NL |
| TIF Govt | 10.29 | NL | GovSyc | 11.84 | NL | Fredm | 17.23 | NL | Gintel Group: | | |
| TIF Govt | 10.29 | NL | Growth | 12.73 | 12.71 | Globd | 10.30 | NL | CapAcp | 11.95 | NL |
| TIF Govt | 10.29 | NL | Ht Yld | 7.62 | 8.00 | GNMA | 10.22 | NL | Erisa | 41.12 | NL |
| TIF Govt | 10.29 | NL | Inc | 7.14 | 7.50 | Gov Sec | 9.77 | NL | GintFd | 72.48 | NL |
| TIF Govt | 10.29 | NL | IncPis | 11.57 | 12.41 | Gofre | 16.01 | NL | Govdear | 10.45 | NL |
| TIF Govt | 10.29 | NL | Smind | 12.75 | 14.40 | Globd | 12.28 | NL | GmGStk | 18.31 | NL |
| TIF Govt | 10.29 | NL | TaxEx | 7.42 | 7.79 | Ht Yld | 17.43 | NL | GrosOB | 12.38 | NL |
| TIF Govt | 10.29 | NL | TaxEx | 11.13 | 12.78 | Ht Yld | 12.27 | NL | GrosNsh | 17.43 | NL |
| TIF Govt | 10.29 | NL | TaxEx | 12.41 | 13.78 | Ht Yld | 12.41 | NL | GriWsh | 12.24 | NL |

Agenda
Finance Cap
Alliance
Review

Net Sales in 1995: North America: \$1,200.0 million, Europe: \$1,000.0 million, Asia: \$1,000.0 million.

(Continued on next page)

American Exchange Options

Figures as of close of trading Friday.

SPORTS

France, N. Zealand In Rugby Cup Final

Compiled by Our Staff From Dispatches

BRISBANE, Australia — New Zealand routed Wales here Sunday, 49-6, to set up a World Cup rugby final against France in Auckland, New Zealand, next Saturday.

Twenty-four hours earlier, France had swept into the final with a dramatic 30-24 victory over Australia in Sydney.

After a classic struggle, Australia and France were at 24-24 with two sevens remaining when fullback Serge Blanco plunged over in the corner for the decisive try.

Australia's hopes had been blighted when it lost center Brett Papworth and 6-foot-7 (2.00-meter) lock Bill Campbell to first-half injuries. Daniel Dubroca, the French captain, said that "when Campbell left the field, we got much more ball from the lineout."

Australia led by 9-0 three minutes from halftime on a dropped goal and two penalty goals from Michael Lynagh. But France got back into the game when, after a lineout near the Australian goal line, lock Alain Lorieux slammed over for a try and wing Didier Camberabero converted.

The second half produced a spectacular flow. France took a 12-9 lead when center Philippe Sella showed superb footwork in scoring an unassisted try under the posts. A minute later Lynagh made a strong break that put Australia fullback David Campese over, giving him a world-record 25 tries in international competition (the previous record, 24, by Scottish wing Ian Smith, was set in 32 test matches between 1924 and 1933; Campese, in his sixth season, has appeared in 30 internationals).

Lynagh converted from the sideline to put Australia in front by 15-12, but then missed a simple penalty goal. Shortly thereafter, a try by wing Patrice Lagisquet, set up by Blanco, again put France ahead. Camberabero converted, and he maintained superb kicking form (making five of seven attempts) with another penalty for a 21-15 lead.

David Cadey, a substitute forward, broke through from short

range, cutting Australia's deficit to 21-19, and Lynagh converted to tie the game.

With 11 minutes left in regulation time, Lynagh kicked an easy penalty goal from in front of the posts for a 24-21 Australian lead, but seven minutes later Camberabero converted an angled penalty goal that leveled things at 24-24.

Alan Jones, the losing coach, described the French victory as "a piece of ambassadorship for the game that the World Cup was looking for. . . . They tilted at a very large windmill and brought it down."

Said Jacques Fouroux, the French coach: "We have been waiting for the occasion to show the public has overtaken the master, and it happened today."

In the other semifinal, New Zealand was totally dominant against Wales.

Driving up the middle almost at will, the front row of Steve McDowell, Sam Fitzpatrick and John Drake, supported by No. 8 Wayne Shelford, led the All Blacks to a 27-0 lead at halftime.

Shelford had a particularly eventful day. He scored two tries, and in the match's closing stages decked second-rower Huw Richards with a short right in retaliation for the Welshman's having punched New Zealand's Gary Whetton. Richards fumbled for several seconds before looking up to find he had been sent from the field by Kerry Fitzgerald, the Australian referee.

Wing John Kirwan exploded through tackles to score two first-half tries. Both of Shelford's scores came after powerful scrum drives from the five-meter line that allowed him to pick up the ball and plunge over.

Other All Black tries came from Alan Whetton, Joe Stanley, Mark Brooks-Cowden and John Drake. Drake, supported by No. 8 Wayne Shelford, led the All Blacks to a 27-0 lead at halftime.

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David Cadey, a substitute forward, broke through from short



Lock Alain Lorieux, muscling over the goal line just before halftime on Saturday for France's first try against Australia.

conversions and a penalty goal from 11 attempts, as it did to the power of the forwards.

Said New Zealand Coach Brian Liochore: "The match was all stop-start. There was too much nibbling to make it really memorable. But at least we know where we are going now and who we are playing."

New Zealand vs. France, he said, "should be the greatest test match that has been played for years."

Saturday's was the worst loss ever by the Welsh national team, dwarfing 35-10 trouncing by Scotland in 1924. Captain Richard Moriarty said Wales would have to regroup before Thursday's playoff

(UPI, AP, AFP)

for third place against Australia in Rotorua, New Zealand.

"We are proud to have made the semifinals," he said, "but today's performance . . . well, we'll have to look at it carefully. Today's game was a lesson in team rugby, and if we can learn from a good lesson we'll gain something going into Thursday."

Andrew Slack, the disappointed Australian Captain, called the consolation game "a waste of time."

He acknowledged that the match with France had been superb, but said, "I would rather win 3-0 with every spectator yawning with boredom."

(UPI, AP, AFP)

Phils Win on Schmidt's 3 Homers, 6 RBI

Compiled by Our Staff From Dispatches

MONTREAL — Mike Schmidt hit three home runs Sunday afternoon, drove in six runs and collected his 2,000th hit in the major leagues as the Philadelphia Phillies beat the Montreal Expos 11-6.

Schmidt tied Mel Ott for 13th place on the all-time home run list with 511, and tied his single-game career high with the six RBI.

SUNDAY BASEBALL

Schmidt, who came off the disabled list Wednesday, has twice hit three home runs in a game and once homered four times in an extra-inning game.

He hit a three-run homer in the third inning off starter Lary Sorenson, making the score 4-0. He homered with the bases empty in the sixth off reliever Curt Brown for his 2,000th hit, becoming the 153rd major-leaguer to reach that mark.

Schmidt then hit a two-run homer, his 16th of the season, off Randy St. Claire during a six-run seventh that made it 11-1. Schmidt, who grounded out in the second inning, came out of the game after his third homer. His replacement, Rick Schu, got bat in the ninth, but also committed two of the three errors in the seventh inning that led to two runs for Montreal.

Mets 3, Pirates 3: In Pittsburgh, Darryl Strawberry hit a two-run homer, Rafael Santana tripled in two runs and Keith Hernandez drove in two with a homer and a double for New York.

Strawberry was ejected during the Pirates' 4-3 victory over the Mets on Saturday night, after he charged the mound when he hit by pitch from Bob Kipper in the second inning. Apparently because of that incident, plate umpire Dutch Rennert warned both Pittsburgh starter Brian Fisher and New York starter John Mitchell after Fisher hit Tim Teufel with a first-inning pitch Sunday. The warning led to the ejections of Mitchell and the Mets' manager, Dave Johnson, in the third when Mitchell brushed back Fisher with a head-high pitch.

Cardinals 3, Cubs 2: In St. Louis, Danny Cox held Chicago to five

hits in 8 2/3 innings as his team swept the three-game series.

The Cardinals scored the winning run in the seventh on John Morris's triple and a suicide-squeeze bunt by Tommy Hensley. They won their fourth straight and extended their lead in the National League East to six games, their largest margin since they won the World Series in 1982. The Cubs have lost four in a row.

Reds 4, Braves 3: In Cincinnati, Dave Concepcion singled in pinch-

runner Barry Larkin with two out in the bottom of the eighth, his second RBI of the game.

Orioles 8, Blue Jays 5: In the American League, in Baltimore, Ray Knight, Cal Ripken Jr. and Jim Dwyer homered to end Toronto's club-record 11-game winning streak and the Orioles' 10-game

streak to complete a three-game series sweep of Boston.

Morris allowed six hits and struck out 10. His winning streak is the longest in the American League this season. Hurst has not won in Tiger Stadium since April 26, 1980, a span of six straight losses.

Twins 6, White Sox 3: In Chicago, Tim Laudner, batting only .180, hit a grand slam to start Minnesota toward victory.

Angels 12, Royals 0: In Kansas City, Missouri, Dick Schofield hit a grand slam to start Minnesota toward victory.

Angels 2, Red Sox 1: In Detroit,

Mike Heath singled in the winning run in the eighth and Don Sutton pitched seven scoreless innings for California.

Yankees 1, Brewers 0: In the eighth, the Yankees' first day after seven victories.

The Brewers, trailing after the Yankees scored four times in the eighth, then got three runs off reliever Dave Righetti. Stevum, who entered the game at shortstop in the seventh, started the rally with a one-out homer, his seventh this season, and Schroeder followed Glenn Bragg's single with his third home run.

Knight's two-run homer broke a 1-1 tie in the sixth. Ripken hit with a man on the seventh and Dwyer, a pinch-hitter, connected with two on in the eighth.

Brewers 6, Yankees 4: In New York, Bill Schroeder went four-for-four, and Dale Stevum hit with two on in the eighth.

Tigers 2, Red Sox 1: In Detroit, Mike Heath singled in the winning run in the eighth and Don Sutton pitched seven scoreless innings for California.

Angels 12, Royals 0: In Kansas City, Missouri, Dick Schofield hit a grand slam to start Minnesota toward victory.

Angels 2, Red Sox 1: In Detroit,

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